FINAL

Site Investigations

Site-Specific Field Sampling Plan and Site-Specific Safety and Health Plan Attachments for Underground Storage Tank Closure Assessments

Fort McClellan

Calhoun County, Alabama

September 1999

Delivery Order CK08
Contract Number DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

US Army Corps
of Engineers
Mobile District

Final
Site-Specific Field Sampling Plan and Site-Specific Safety and Health Plan Attachments for Underground Storage Tank Closure Assessments

Fort McClellan
Calhoun County, Alabama

Prepared for:

U.S. Army Corps of Engineers, Mobile District
109 St. Joseph Street
Mobile, Alabama 36602

Prepared by:

IT Corporation
312 Directors Drive
Knoxville, Tennessee 37923

Delivery Order CK08
Contract No. DACA21-96-D-0018
IT Project No. 783149

September 1999

Revision 1

Final
Site-Specific Field Sampling Plan Attachment for Underground Storage Tank Closure Assessments

Fort McClellan
Calhoun County, Alabama

Prepared for:

U.S. Army Corps of Engineers, Mobile District
109 St. Joseph Street
Mobile, Alabama 36602

Prepared by:

IT Corporation
312 Directors Drive
Knoxville, Tennessee 37923

Delivery Order CK08
Contract No. DACA21-96-D-0018
IT Project No. 783149

September 1999

Revision 1

Table of Contents

Page

Table of Contents (Continued)

Page

Table of Contents *(Continued)*

Page

List of Tables

List of Figures

List of Figures *(Continued)*

List of Acronyms

ADEM	Alabama Department of Environmental Management
AST	aboveground storage tank
bls	below land surface
Braun	Braun Intertec Corporation
BTEX	benzene, toluene, ethyl benzene and xylene
CERFA	Community Environmental Response Facilitation Act
CESAS	Corps of Engineers South Atlantic Savannah
CLP	Contract Laboratory Program
COC	chain of custody
°F	degrees Fahrenheit
DOD	U.S. Department of Defense
DOT	U.S. Department of Transportation
DQO	data quality objective
EBS	environmental baseline survey
E&E	Ecology and Environmental, Inc.
EPA	U.S. Environmental Protection Agency
ESE	Environmental Science and Engineering, Inc.
FID	flame ionization detector
FTMC	Fort McClellan
GPS	global positioning system
IDW	investigation-derived waste
IT	IT Corporation
MCL	maximum contaminant level
MTBE	methyl tertiary butyl ether
NFA	no further action
O&M	operation and maintenance
PCOC	potential contaminants of concern
PPM	parts per million
PPMV	parts per million vapors
PID	photoionization detection
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
QAP	installation-wide quality assurance plan

List of Acronyms (Continued)

SAP	installation-wide sampling and analysis plan
SEMS	Southern Environmental Management & Specialties, Inc.
SFSP	site-specific field sampling plan
SHP	installation-wide safety and health plan
SSHP	site-specific safety and health plan
TPH	total petroleum hydrocarbons
TRPH	total recoverable petroleum hydrocarbons
Theta	Theta Engineering Inc.
USACE	U.S. Army Corps of Engineers
UST	underground storage tank
UXO	unexplored ordnance
VECP	value engineering change proposal
yd^3	cubic yards
WP	installation-wide work plan

Executive Summary

In accordance with Contract No. DACA21-96-D-0018, Delivery Order CK08, IT Corporation (IT) will conduct twenty-nine underground storage tank (UST) closure assessments at Fort McClellan, Calhoun County, Alabama. Twenty-nine sites where USTs were removed or abandoned in-place at Fort McClellan requires additional sampling so that closure reports can be finalized and the property transferred. At one of these sites, there are two USTs, therefore, there are a total of thirty USTs being addressed at twenty-nine sites. The purpose of this site-specific field-sampling plan (SFSP) is to provide technical guidance for soil and groundwater sampling activities for the UST closure assessments. The twenty-nine UST sites, described with building and parcel numbers, are listed below.

- Telephone Exchange Building 251, Parcel 3(7)
- Recreation Building 503, Parcel 9(7)
- Base Service Station Building 2109, Parcel 21(7) and Parcel 22(7)
- Ammunition Supply Point Building 4400, Parcel 31(7)
- Building S-55, Parcel 33(7)
- Fitness Center Building 128, Parcel 34(7)
- Field House Building 130 Parcel 35(7)
- Administrative Building 141, Parcel 36(7)
- Administrative Building 143, Parcel 37(7)
- Bivouac Area Building B-44, Parcel 38(7)
- Clothing Building 273, Parcel 39(7)
- Noble Army Hospital Building 294, Parcel 40(7)
- Building 796, Parcel 43(7)
- Building 1201, Parcel 44(7)
- Building 1202, Parcel 45(7)
- Bowling Alley Building 1928, Parcel 48(7)
- Dental Clinic Building 1929, Parcel 49(7)
- PX Building 1965, Parcel 50(7)
- Post Office Building 1966, Parcel 51(7)
- Barracks Building 3131, Parcel 54(7)
- Headquarters Building 3161, Parcel 55(7)
- Community Club Building 3212, Parcel 56(7)
- Recreation Center Building 3213, Parcel 57(7)
- Chapel Building 3293, Parcel 58(7)
- Building 162, Parcel 63(7)
- Wac Museum Building 1077, Parcel 167(7)
- Building 1338, Parcel 502(7)
- Building 3179, Parcel 505(7)
- Building 3691, Parcel 506(7).

In 1998, IT was retained by the U.S. Army Corps of Engineers (USACE)-Mobile District to conduct a records review of all past investigations/closures related to UST activities at Fort McClellan. The two-fold purpose of the records review was 1). determine the adequacy of previous UST activities with respect to current Alabama Department of Environmental Management (ADEM) tank closure regulations, and 2). compile all UST information into one comprehensive document for easier future reference. A UST Summary Report documenting the status of all USTs at FTMC was prepared and submitted to the USACE-Mobile District, ADEM, and U.S. Environmental Protection Agency (EPA) on April 13, 1999. Based on the findings of the UST Summary Report, these twenty-nine UST sites require further evaluation to achieve closure in compliance with ADEM UST closure regulations.

The objective of this work is to determine the current environmental condition at each UST site, and to determine if UST operations have impacted the soil and groundwater.

IT will collect 86 subsurface soil samples and 56 groundwater samples at twenty-nine UST sites. The data from these samples will be compared with site-specific screening levels to determine whether chemicals exist in concentrations high enough to require further action, or if the closure reports can be finalized so that the property is suitable to transfer. Chemical analyses of the samples collected during the field program will consist of benzene, toluene, ethyl benzene, and xylene (BTEX), polynuclear aromatic hydrocarbons (PAH), and lead.

If surface water samples or sediment samples collected during the Watershed Program indicate that the existing or removed USTs may be a contributing factor to contamination in the surface water bodies, additional samples and/or field work may be conducted.

Five UST sites: Building B-44 Parcel 38(7), Building 1201 Parcel 44(7), Building 1202 Parcel 45(7), Barracks Building 3131 Parcel 54(7), and the Headquarters Building 3161 Parcel 55(7) fall within the "Possible Explosive Ordnance Impact Area" shown on Plate 10 of the FTMC Archive Search Report Maps (USACE, 1998). Therefore, IT will conduct unexploded ordnance (UXO) surface avoidance surveys and downhole surveys during field work.

This SFSP attachment to the installation-wide sampling and analysis plan (SAP) (IT, 1998a) for the twenty-nine UST sites will be used in conjunction with the site-specific safety and health plan (SSHP), installation-wide work plan (IT, 1998b), SAP, and UST Summary Report (IT, 1999). The SAP includes the installation-wide safety and health plan, waste management plan, and quality assurance plan. Site-specific hazard analyses are included in the SSHP.

1.0 Project Description

1.1 Introduction

The U.S. Army is conducting studies of the environmental impact of suspected contaminants at Fort McClellan (FTMC) in Calhoun County, Alabama, under the management of the U.S. Army Corps of Engineers (USACE)-Mobile District. The USACE has contracted IT Corporation (IT) to provide environmental services for underground storage tank closure assessments at twenty-nine sites, under Delivery Order CK08, Contract No. DACA21-96-D-0018 (USACE, 1999). At one of these sites, there are two USTs being addressed in this work plan, therefore, there are a total of thirty USTs at twenty-nine sites. The objective of the underground storage tank (UST) closure assessment is to determine current environmental conditions at each UST site. The location of each UST site is shown on Figure 1-1.

This site-specific field sampling plan (SFSP) attachment to the installation-wide sampling and analysis plan (SAP) (IT, 1998a) for FTMC has been prepared to provide technical guidance for sample collection and analysis at twenty-nine UST sites. This SFSP will be used in conjunction with the site-specific safety and health plan (SSHP) developed for the twenty-nine UST sites, the installation-wide work plan (WP) (IT, 1998b), SAP, and UST Summary Report. The SAP includes the installation-wide safety and health plan (SHP), waste management plan, and quality assurance plan (QAP).

1.2 Site Description

A description of each UST site is provided below.

1.2.1 Telephone Exchange, Building 251, Parcel 3(7)

Building 251 is known as the Telephone Exchange (Figure 1-2). A creek (South Branch of Cane Creek) is located west/southwest of the Telephone Exchange. This location had one 600-gallon diesel UST that was removed but not replaced in 1994. This UST was used as a backup fuel supply for an emergency generator. A UST Closure Site Assessment Report prepared by Braun Intertec Corporation (Braun) was reviewed and is included in Appendix A, Attachment 3 of the UST Summary Report (IT, 1999). Approximately 100 feet of product piping was closed without removal. Underground utilities prohibited pipe trench samples from the middle 50 feet of the pipe run. Notes indicated that the piping was purged of product but did not reference whether the piping was capped. The closure report noted that upon the tank removal, the center seam of the UST appeared to be cracked around the entire circumference. The closure report documents total

783149es.000 | 783149
J. TARR | J. YACOUB
J. TARR
05/28/99 | D. BILLINGSLEY

E 658,800 | E 678,800 | E 698,800

LEGEND:
● UNDERGROUND STORAGE TANK PARCEL LOCATION

FORT McCLELLAN MAIN POST

CHOCCOLOCCO CORRIDOR

N 1,174,000

N 1,154,000

PARCEL 502(7)
PARCEL 44(7)
PARCEL 45(7)
PARCEL 9(7)
PARCEL 167(7)
PARCEL 40(7)
PARCEL 39(7)
PARCEL 3(7)
PARCEL 33(7)
PARCEL 31(7)
PARCEL 43(7)
PARCEL 22(7)
PARCEL 37(7)
PARCEL 48(7)
PARCEL 50(7)
PARCEL 36(7)
PARCEL 49(7)
PARCEL 506(7)
PARCEL 56(7)
PARCEL 58(7)
PARCEL 54(7)
PARCEL 38(7)
PARCEL 55(7)
PARCEL 57(7)
PARCEL 63(7)
PARCEL 35(7)
PARCEL 34(7)
PARCEL 21(7)
PARCEL 505(7)
PARCEL 51(7)

NO. 21 HWY.
JACKSONVILLE ANNISTON

SCALE
0 3000 6000 FEET

FIGURE 1-1
SITE LOCATION MAP
UNDERGROUND STORGE TANK
CLOSURE ASSESSMENT SITES
ON MAIN POST

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

02/23/04 11:20:00 AM
jwaters
K:\MCCLELAN\783149\783149es.000

E 668,500

E 668,700

E 668,900

N 1,170,500

N 1,170,400

N 1,170,300

GENERATOR

UNDERGROUND FUEL LINES CLOSED IN PLACE

ABOVEGROUND STORAGE TANK

PARCEL 251

ASPHALT

251

APPROXIMATE LOCATION OF REMOVED 600-GAL. DIESEL UST

ASPHALT ROAD

241

PARKING

ASPHALT ROAD

GRASS

PARKING LOT (ASPHALT)

PARKING LOT (ASPHALT)

SOUTH BRANCH OF CANE CREEK

BALTZELL GATE ROAD

15 TH STREET

LEGEND

- PAVED ROADS AND PARKING
- BUILDING
- TREES / TREELINE
- PARCEL BOUNDARY
- SURFACE DRAINAGE / CREEK
- FENCE
- UTILITY POLE
- SS SANITARY SEWER LINE
- SD STORM DRAINAGE LINE
- UST UNDERGROUND STORAGE TANK

SCALE

0 40 80 FEET

FIGURE 1-2
SITE MAP
TELEPHONE EXCHANGE BUILDING 251
PARCEL 3(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

STARTNG DATE: 05/24/99	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: J. TARR
DRAWN BY: D. BILLINGSLEY	DRAWN BY:	ENGR. CHCK. BY: J. TARR	PROJ. MGR.: J. YACOUB

DWG. NO.: ...\78314es.001
PROJ. NO.: 783149

07 JUL 1999 14:59:51
DBILLNG
c:\cadd\design\783149es.001

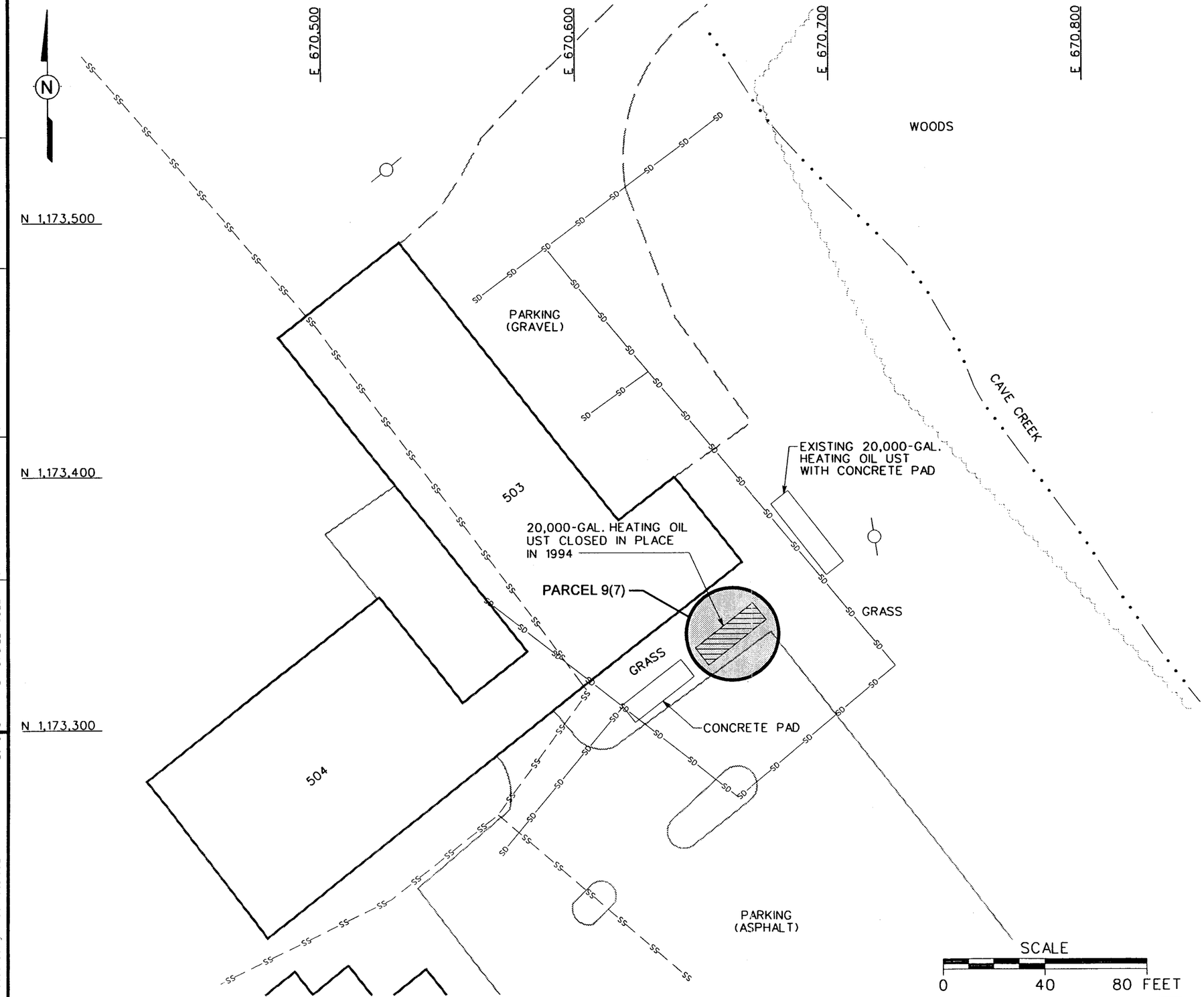
petroleum hydrocarbons (TPH) concentrations in soil of 5,800 parts per million (ppm). Depth to groundwater, determined from four monitoring wells installed at the site, (shown on Sample Location Map, Figure 4-1), was approximately 4.5 feet in depth. Groundwater samples were collected and analyzed for benzene, toluene, ethyl benzene, and xylene (BTEX) and PAHs. Approximately 6 cubic yards (yd^3) of contaminated soils were removed during closure activities. The method of soil disposal was not noted. According to the FTMC EBS, this site obtained a NFA with the understanding that the land and property owners would not change. A copy of the ADEM No Further Action (NFA) letter was not obtained.

1.2.2 Recreation Building, Building 503, Parcel 9(7)

Building 503 is known as the Recreation Building (Figure 1-3). Cave Creek is located approximately 100 feet east of the Recreational Building. This location has one active 20,000-gallon heating oil tank. This tank was installed in 1994 following the closure of one 20,000-gallon heating oil tank. The tank was closed in place on May 13, 1994. The UST Closure Report prepared by Braun was reviewed and provided the following information. Approximately 25 feet of piping was capped at both ends and abandoned in place. Three soil borings were installed, one on each accessible side of the UST, to a depth of 10 feet (exact locations unknown). The interior of the tank was accessed and appeared to be in good condition. Soil samples were submitted for TPH and lead analyses. TPH concentrations of 10 ppm and lead concentrations of 24 ppm were documented. The depth of groundwater was determined to be greater than 20 feet bls during the excavation for the newer tank. Notable product odor was not detected within the excavation and soils were not removed for disposal. The closure report does not mention the disposition of the product piping. ADEM granted an NFA for this tank closure. The ADEM NFA letter can be found in Appendix E of the UST Summary Report (IT, 1999).

1.2.3 Base Service Station, Building 2109, Parcel 21(7) and Parcel 22(7)

Building 2109 is adjacent to the base service station (Figure 1-4). This location houses a tank farm consisting of four 10,000-gallon USTs northeast of Building 2109 listed as Parcel 21 (7). Also, this location has a 1,000-gallon UST containing waste oil, which is tracked under Parcel Number 22(7). In November 1989, one of the four tanks (Parcel 21[7]) failed a tank tightness test. Analysis of soil samples from soil borings installed around this tank in December 1989 by Ecology and Environmental, Inc. (E&E) detected total recoverable petroleum hydrocarbons (TRPH) at concentrations ranging from 20 to 980 ppm (FTMC, 1990). The four tanks were removed and replaced in early 1991. Four new tanks were installed south of the previous location (Figure 1-4). Two of the four tanks currently contain gasoline and the other two tanks



LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TREES / TREELINE
- PARCEL BOUNDARY
- SURFACE DRAINAGE / CREEK
- UTILITY POLE
- SS — SANITARY SEWER LINE
- SD — STORM DRAINAGE LINE
- UST — UNDERGROUND STORAGE TANK

FIGURE 1-3
SITE MAP
RECREATION BUILDING 503
PARCEL 9(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DRAFT. CHCK. BY:
ENGR. CHCK. BY: J. TARR
INITIATOR: J. TARR
PROJ. MGR.: J. YACOUB
DWG. NO.: ...\78314es.002
PROJ. NO.: 783149
DATE LAST REV.:
DRAWN BY:
STARTING DATE: 06/09/99
DRAWN BY: D. BILLINGSLEY
06 JUL 1999 14:29:18
c:\cadd\design\783149es.002
DBILLING

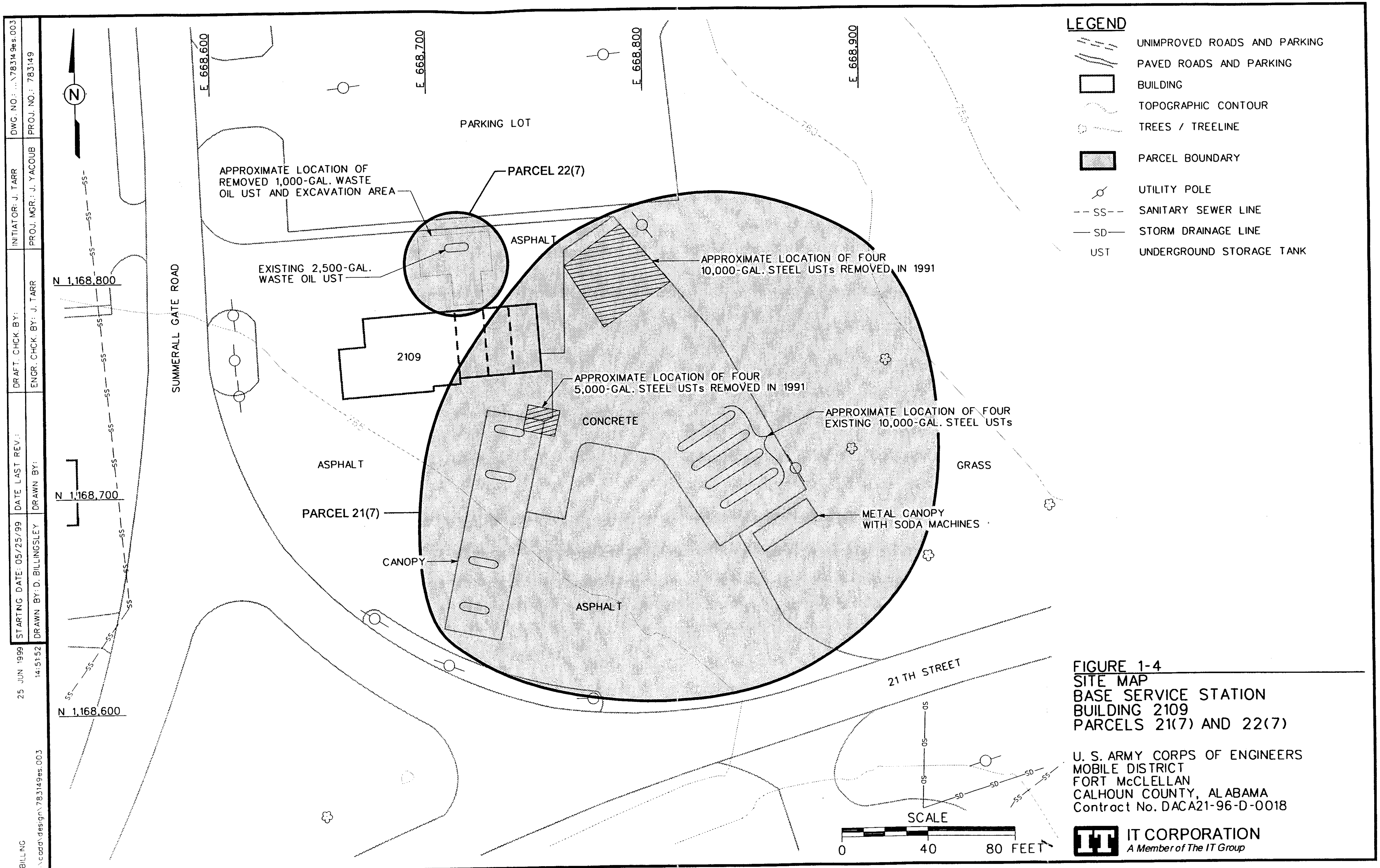

DWG. NO.: ...\783149es.003
PROJ. NO.: 783149
INITIATOR: J. TARR
PROJ. MGR.: J. YACOUB
DRAFT. CHCK. BY:
ENGR. CHCK. BY: J. TARR
DATE LAST REV.:
DRAWN BY:
STARTING DATE: 05/25/99
DRAWN BY: D. BILLINGSLEY
25 JUN 1999
14:51:52
DBILLING
c:\cadd\design\783149es.003
N
E 668,600
E 668,700
E 668,800
E 668,900
N 1,168,800
N 1,168,700
N 1,168,600
SUMMERALL GATE ROAD
PARKING LOT
PARCEL 22(7)
APPROXIMATE LOCATION OF REMOVED 1,000-GAL. WASTE OIL UST AND EXCAVATION AREA
EXISTING 2,500-GAL. WASTE OIL UST
ASPHALT
APPROXIMATE LOCATION OF FOUR 10,000-GAL. STEEL USTs REMOVED IN 1991
2109
APPROXIMATE LOCATION OF FOUR 5,000-GAL. STEEL USTs REMOVED IN 1991
CONCRETE
APPROXIMATE LOCATION OF FOUR EXISTING 10,000-GAL. STEEL USTs
ASPHALT
GRASS
PARCEL 21(7)
METAL CANOPY WITH SODA MACHINES
CANOPY
ASPHALT
21 TH STREET
SCALE
0
40
80 FEET
LEGEND
UNIMPROVED ROADS AND PARKING
PAVED ROADS AND PARKING
BUILDING
TOPOGRAPHIC CONTOUR
TREES / TREELINE
PARCEL BOUNDARY
UTILITY POLE
SS SANITARY SEWER LINE
SD STORM DRAINAGE LINE
UST UNDERGROUND STORAGE TANK
U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018
IT CORPORATION
A Member of The IT Group

FIGURE 1-4
SITE MAP
BASE SERVICE STATION
BUILDING 2109
PARCELS 21(7) AND 22(7)

contain diesel fuel. The preliminary and secondary investigation reports for Parcel 21 (7) are enclosed with the UST Summary Report (IT, 1999).
During the removal of the four 10,000-gallon steel tanks (Parcel 21[7]) in 1991, four additional 5,000-gallon USTs were discovered adjacent and north of the fuel pump island (Figure 1-4). These previously unknown USTs were estimated to have been used during the 1940s (E&E, 1991). When discovered, these tanks contained gravel, water and gasoline. Based on a recommendation by ADEM, these tanks and surrounding soil were also removed during the removal of the four 10, 000-gallon USTs (Parcel 21[7]) (E&E, 1991). There was not any other reference found relating to the removal of these four 5,000-gallon USTs or the condition of the excavation site.

A secondary investigation of the UST site at Parcel 21 (7) was completed in September 1991. In order to delineate the vertical and horizontal extent of contamination documented at the site, nine additional shallow and two deep monitoring wells were installed. Groundwater samples were collected from the most recently installed wells. The depth to groundwater measured in the monitoring wells ranged from approximately 12 to 16 feet below land surface (bls). The potential for groundwater flow in the shallow aquifer is in a radial pattern away from the center of the site, generally northeast, northwest, and south. Lithologic logs maintained during monitoring well installation indicate that the surface of the underlying bedrock forms a structural mound in the center of the site and may be influencing the direction of groundwater flow at the site. Based on the results of a specific capacity test, there does not appear to be any significant hydraulic connection between the shallow and deep aquifer zones. Groundwater samples collected from wells that yielded enough water for sampling were analyzed for BTEX, PAHs, and lead. Six wells exceeded the ADEM maximum contaminant level (MCL) for benzene. Detectable concentrations of lead were present in groundwater samples collected. With the exception of low methyl tertiary butyl ether (MTBE) levels detected in a sample collected from deep well MW3-8D (screened at 47.5 feet bls), no other analyzed parameters were detected in the deep well samples.

The secondary investigation for Parcel 21 (7) concluded that the site soils contained low levels of TRPH, while significant levels of petroleum-related compounds are present in the groundwater. However given the existing conditions, the potential for rapid contaminant migration laterally within the aquifer zone appears to be limited. The secondary investigation proposed that a quarterly program of groundwater sampling and analysis be implemented to closely monitor groundwater quality in both the shallow and deeper aquifers.

The environmental baseline survey (EBS) (ESE, 1998) indicates that this site has undergone three years of quarterly groundwater sampling. According to Mr. Nolan Lee Jaye, the site no longer is required to perform the quarterly sampling. Quarterly monitoring reports were not available for review. A copy of the ADEM NFA can be found in the UST Summary Report (IT, 1999).

Also, a 1,000-gallon waste oil UST (Parcel 22 [7]) was located north of Building 2109. This 1,000-gallon tank was removed and replaced with a 2,500-gallon UST. A closure report, prepared by Braun (see Appendix A, Attachment 11 in the UST Summary Report) states the 1,000-gallon UST was removed on April 5, 1994. A notable product odor was not detected. Soil samples were collected from the side walls of the excavation and analyzed for TPH only. Groundwater was not encountered and the excavation was backfilled without collecting groundwater samples. The tank appeared to be in good condition upon removal. TPH concentrations from the stockpiled soils were 60 ppm. Ten yd^3 of contaminated soil were removed from the site and transported to the base landfill for thin spreading. The closure report for the 1000-gallon UST at Parcel 22(7) concluded that a petroleum release had occurred onsite and the vertical and horizontal extent of contamination in the soil had not been determined.

Based on data available from nearby Parcel Number 21(7), the depth to groundwater varies across the site from approximately 12 to 16 feet bls. A typical 1,000-gallon tank has a radius of 4 feet and is installed so that the top of the UST is approximately 2 to 3 feet below grade. That would indicate that the bottom of the tank is at approximately 7 feet below the surface. This estimated depth would meet the closure requirement of groundwater being more than 5 feet below the base of the excavation; thus groundwater samples are not required. Based on the report, a significant amount of soils were excavated for a tank of this size. Since TPH concentrations from the stockpiled soils were less than 100 ppm, it doesn't appear that the UST significantly impacted the soils at the site. The only requirement omitted during the closure activities was the collection of soil samples for lead analysis.

1.2.4 Ammunition Supply Point at Building 4400, Parcel 31(7)

Building 4400 is in the Ammunition Supply Point (Figure 1-5). Building 4400 is in the approximate location of Former Building 4407. The EBS report contains contradictory and confusing information that indicates in Section 5.1.1.3 that a 1,000-gallon No. 2 heating oil tank was removed from this location and that a closure report was not on file. Table 6-1 of the EBS references a 1,000-gallon heating oil tank at the same location that was closed in place in 1991. Table 5.1-2 of the EBS identifies a 1,000-gallon heating oil tank closed during 1994 without a

DRAFT. CHCK. BY:
ENGR. CHCK. BY: J. TARR
INITIATOR: J. TARR
PROJ. MGR.: J. YACOUB
DWG. NO.: ...\783149es.004
PROJ. NO.: 783149
DATE LAST REV.:
DRAWN BY:
STARTNG DATE: 05/25/99
DRAWN BY: D. BILLINGSLEY

06 JUL 1999 14:32:14

c:\cadd\design\783149es.004 DBILLING

N

E 673,000

E 673,100

E 673,200

E 673,300

4423

4422

WOODS

N 1,173,600

PARKING LOT
(GRAVEL)

PARCEL 31(7)

APPROXIMATE LOCATION OF 1,000-GAL.
HEATING OIL UST REMOVED IN 1994

18 TH STREET

METAL FLAMMABLE
STORAGE SHED

4400

PARKING LOT
(ASPHALT)

N 1,173,500

SIDEWALK

WOODS

APPROXIMATE LOCATION OF
FORMER BUILDING 4407

N 1,173,400

LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TREES / TREELINE
- PARCEL BOUNDARY
- FENCE
- RAILROAD
- UTILITY POLE
- UST — UNDERGROUND STORAGE TANK

SCALE
0 40 80 FEET

FIGURE 1-5
SITE MAP
AMMUNITION SUPPLY POINT
BUILDING 4400
PARCEL 31(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

closure report. IT was unable to reconcile this information during the file review, and could not identify these UST locations in the field. However, a closure report was reviewed for one 1,000-gallon diesel tank excavated and removed on September 7, 1994. The closure report, prepared by Charter South, Inc. is presented in Appendix A, Attachment 15 of the UST Summary Report (IT, 1999). The closure report documents that a notable mild diesel odor was found during the excavation. Groundwater was determined to be at approximately 10 feet bls. Soil samples were collected and analyzed from all four sides and bottom of the excavation. Upon excavation of the tank, pinholes were noted at both ends of the bottom of the tank. The excavation was not backfilled. The aboveground piping was removed. It appears from the report that the tank pit was over excavated and resampled in an attempt to recover all soils containing over 100 ppm TPH. TPH concentrations of the excavated soils ranged from 347 to 2,480 ppm. Approximately 45 yd^3 of contaminated soils were removed from the excavation and stockpiled for further disposition. The report notes that approval was pending for the soil to be disposed at the landfill.

1.2.5 Former Building S-55, Parcel 33(7)

Building S-55 has been demolished (Figure 1-6). This location formerly housed one 4,000-gallon heating oil UST, reportedly closed in 1991. A closure report is not on file. IT has reviewed archived information related to the UST removal to determine the approximate location of the tank excavation. The tank was removed by IT on March 20, 1991. Six soil borings were drilled around the perimeter of the tank in December 1990. The preliminary analytical data indicated that TPH and total lead compounds existed within the subsurface soils (see the UST Summary Report, Appendix D). During the tank excavation, soil samples were collected from the four walls and from the bottom center of the excavation. The samples were analyzed for TPH, total lead, TCLP lead, and BTEX (see the UST Summary Report, Table 1-3). Analytical results indicate that total lead concentrations ranged from 8.6 to 12 ppm while TCLP lead was below detection limit. TPH concentrations were detected from two soil samples. The east and south walls of the excavation had TPH concentrations of 170 and 140 ppm, respectively. BTEX concentrations were below detection limits. It appears, based on the field notes and analytical data, that some samples were documented with as much as 36,000 ppm TPH. In general, the analytical results indicate that a minimal amount of contaminated soil existed at this facility. Depth to groundwater was not referenced in the field notes reviewed.

1.2.6 Fitness Center, Building 128, Parcel 34(7)

Building 128 is known as the Fitness Center (Figure 1-7). This location housed one 4,000-gallon heating oil UST, which was removed and replaced with another 4,000-gallon UST during 1996. The closure report, prepared by Theta Engineering, Inc. (Theta), (presented in Appendix A,

DRILLING
c:\acad\design\783149es.005
24 SEP 1999 14:10:25

DRAFT. CHCK. BY:	
ENGR. CHCK. BY: J. TARR	PROJ. MGR: J. YACOUB
INITIATOR: J. TARR	PROJ. NO.: 783149
DWG. NO.: ...\78314 9es.005	
STARTNG DATE: 05/25/99	DATE LAST REV.:
DRAWN BY: D. BILLINGSLEY	DRAWN BY:

N

E 666,500

E 666,700

E 666,900

N 1,171,700

N 1,171,600

N 1,171,500

57

PARKING LOT (ASPHALT)

APPROXIMATE BOUNDARY OF FORMER BUILDING S-55

DUMPSTER

DIRT/GRASS

PARCEL 33(7)

ASPHALT

ACCESS ROAD

APPROXIMATE LOCATION OF 4,000-GAL. HEATING OIL UST EXCAVATION

DIRT ACCESS ROAD

DIRT

SWIMMING POOL

SIDEWALK

ASPHALT

PARKING LOT (ASPHALT)

13 TH AVENUE

745 750 755 760 765

50

SCALE

0 40 80 FEET

LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS
- TREES / TREELINE
- PARCEL BOUNDARY
- FENCE
- UTILITY POLE
- SS SANITARY SEWER LINE
- SD STORM DRAINAGE LINE
- UST UNDERGROUND STORAGE TANK

FIGURE 1-6
SITE MAP
FORMER BUILDING S-55
PARCEL 33(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

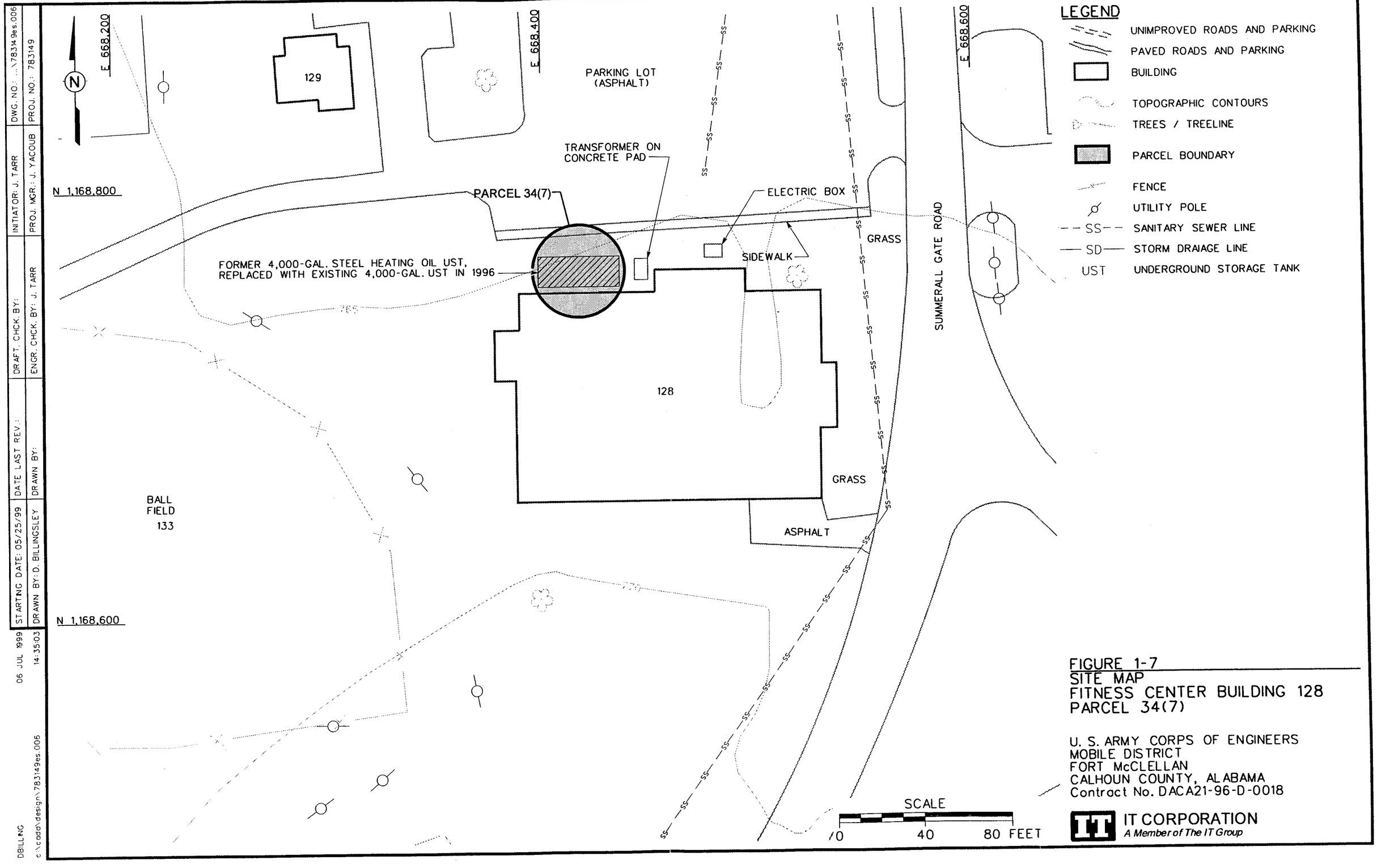


FIGURE 1-7
SITE MAP
FITNESS CENTER BUILDING 128
PARCEL 34(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DWG. NO.: ...\783149es.006 | PROJ. NO.: 783149
INITIATOR: J. TARR | PROJ. MGR.: J. YACOUB
DRAFT. CHCK. BY: | ENGR. CHCK. BY: J. TARR
DATE LAST REV.: | DRAWN BY:
STARTING DATE: 05/25/99 | DRAWN BY: D. BILLINGSLEY
06 JUL 1999 14:35:03
DBILLING c:\cadd\design\783149es.006

Attachment 16 of the UST Summary Report) documented that a mild oil heating product odor was detected within the excavation. Examination of the removed tank noted one hole on the northeast end of the tank bottom. The depth to groundwater was estimated to be approximately 12 feet bls. This estimate was from topographical features within the area. The size of the tank removed, 5.5 by 24 feet, would put the bottom of this tank within 5 feet of the estimated groundwater depth. Soil samples were collected and field screened for organic vapors. Contaminated soils were excavated and stockpiled. Stockpiled soils were sampled and analyzed for TPH. Results from TPH analysis indicated concentrations of 854 ppm. Groundwater samples were not collected. Soils not exhibiting evidence of contamination were used to backfill the excavation. Approximately 16 yd^3 of contaminated soils were stockpiled to await thermal volatilization.

Attached to the closure report was justification for not obtaining closure samples. The subject UST formerly contained heating oil for use at the tank location. Consequently, the UST was not regulated by the Alabama Department of Environmental Management. Theta prepared a value engineering change proposal (VECP) to guide closure of non-regulated tanks (Theta, 1996). The VECP was submitted on December 1, 1995 and approved by the Base on February 22, 1996.

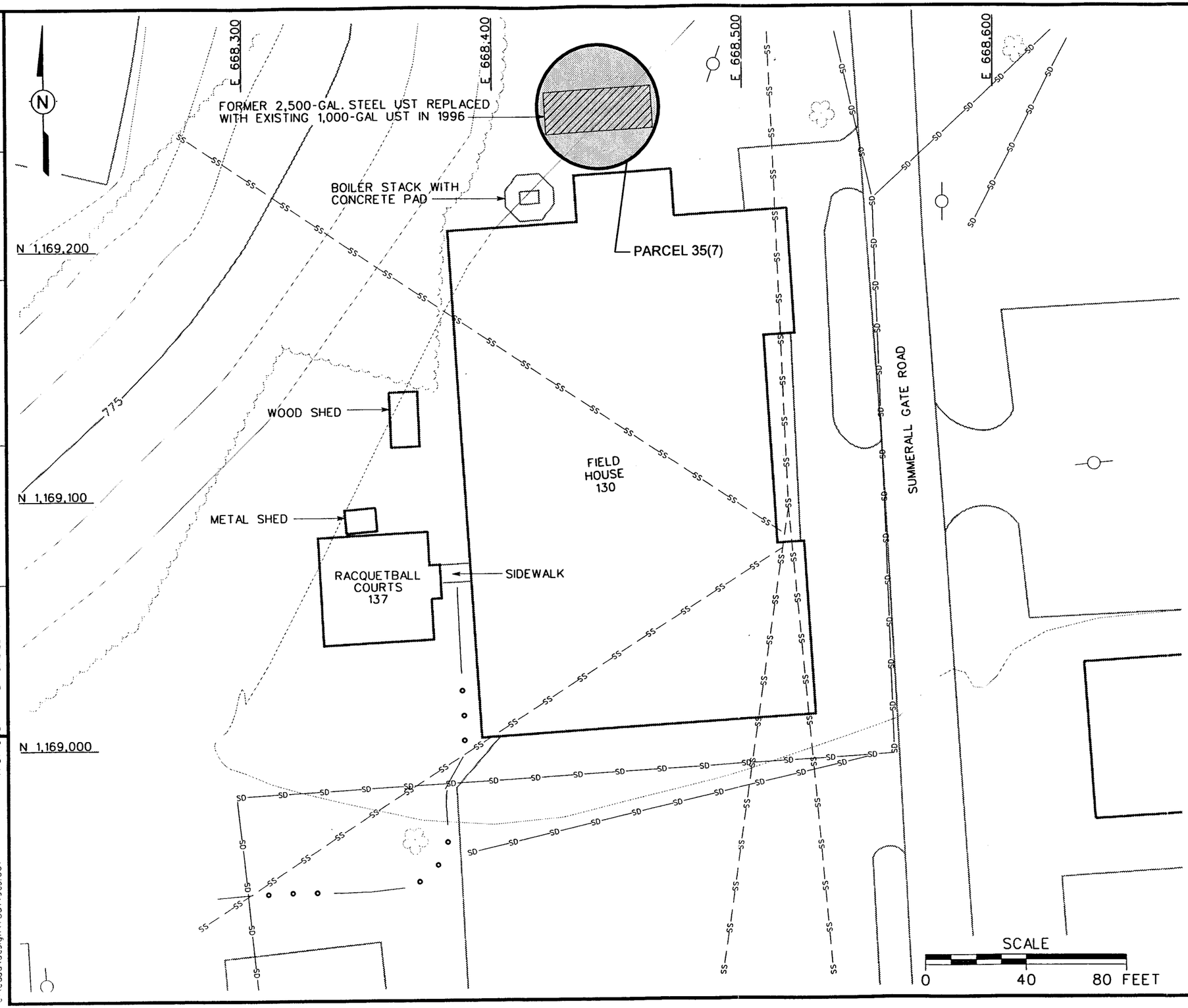
In accordance with the VECP, soil not exhibiting visual or olfactory evidence of contamination would be considered non-contaminated and could be used to backfill the tank pit. Soil exhibiting visual and/or olfactory evidence of contamination was field screened using a photoionization detector (PID). Soils exhibiting a PID reading of 20 parts per million vapors (ppmv) or less were considered non-contaminated. Waste characterization samples were collected of soil exhibiting evidence of contamination. UST closure samples were collected only if all soil exhibiting evidence of petroleum contamination was not over-excavated.

1.2.7 Field House, Building 130, Parcel 35(7)

Building 130 is known as the Field House (Figure 1-8). This location housed one 2,500-gallon heating oil UST, which was removed and replaced with a 1,000-gallon UST in 1996. A closure report, prepared by Theta, was reviewed and is included in Appendix A, Attachment 17 of the UST Summary Report (IT, 1999). A product odor was not detected within the excavation. The removed tank appeared to be in good condition. The depth to groundwater was estimated to be approximately 10 feet bls. This estimate was obtained from extending the excavation depth an additional 5 feet. Soil samples were collected and field screened for organic vapors. Groundwater samples were not collected. Evidence of contamination was not observed. Excavated soils

DRILLNG
06 JUL 1999 14:37:10
c:\cadd\design\783149es.007

STARTNG DATE: 05/25/99	DATE LAST REV.:
DRAWN BY: D. BILLINGSLEY	DRAWN BY:
DRAFT. CHCK. BY:	
ENGR. CHCK. BY: J. TARR	PROJ. MGR.: J. YACOUB
INITIATOR: J. TARR	PROJ. NO.: 783149
	DWG. NO.: ...\783149es.007



LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS
- TREES / TREELINE
- PARCEL BOUNDARY
- SURFACE DRAINAGE / CREEK
- UTILITY POLE
- SS — SANITARY SEWER LINE
- SD — STORM DRAINAGE LINE
- UST — UNDERGROUND STORAGE TANK

FIGURE 1-8
SITE MAP
FIELD HOUSE BUILDING 130
PARCEL 35(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

were returned to the excavation upon completion of the closure activities. Attached to this closure report was a VECP for not obtaining closure samples (see section 1.2.6).

1.2.8 Administrative Building, Building 141, Parcel 36(7)

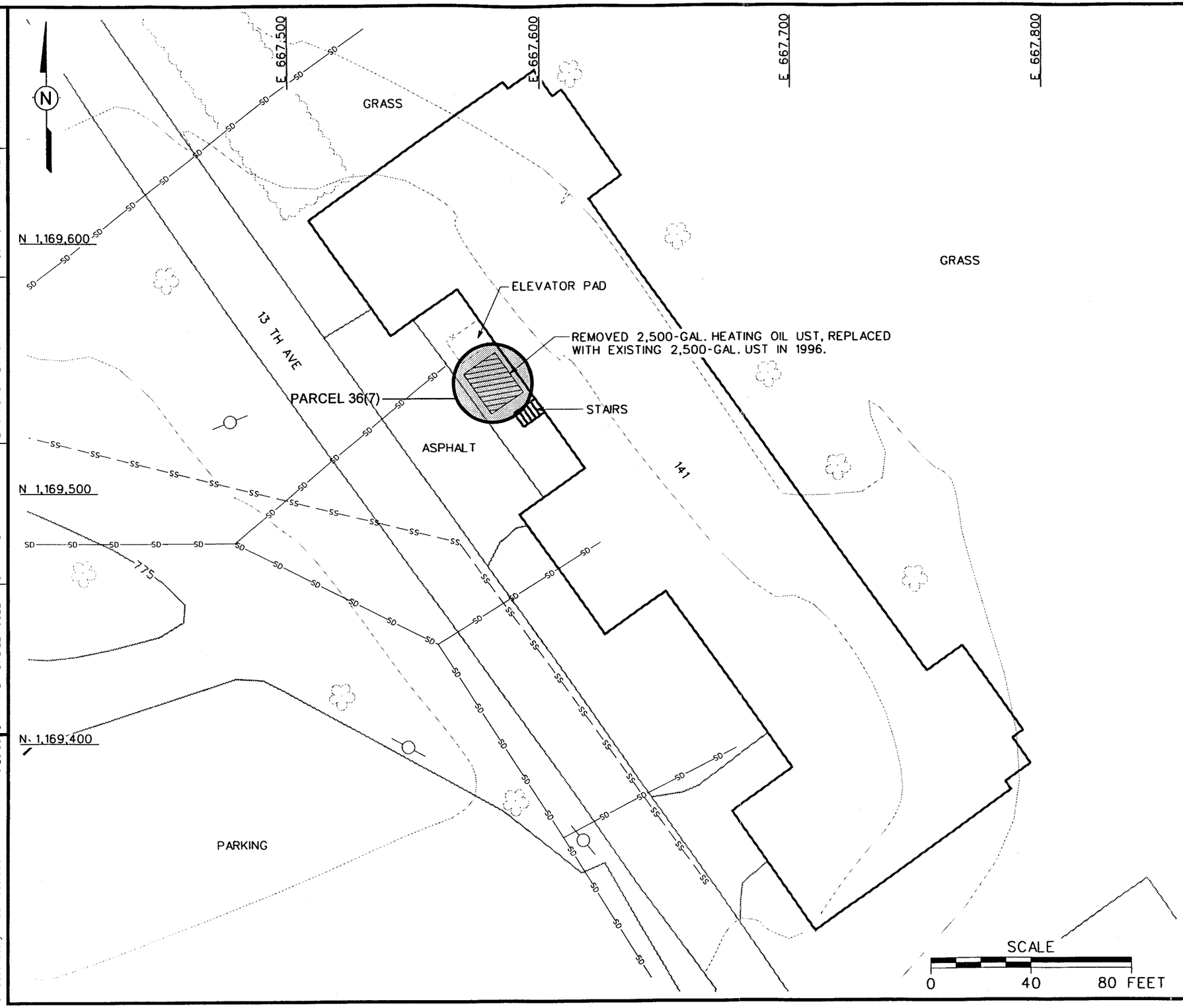
Building 141 is known as the Administrative Building (Figure 1-9). This location formerly housed one 2,500-gallon heating oil UST, which was removed and replaced in 1996 with another 2,500-gallon UST. A closure report prepared by Theta was reviewed and is included in Appendix A, Attachment 18 of the UST Summary Report (IT, 1999). Product odor was not detected within the excavation. The removed tank appeared to be in good condition. The depth to groundwater was estimated to be greater than 5 feet below the base of the excavation. This estimate was obtained from extending the excavation depth an additional 5 feet. Soil samples were collected and field screened for organic vapors. Groundwater samples were not collected. Evidence of contamination was not observed. Excavated soils were returned to the excavation upon completion of the closure activities. Attached to this closure report was a VECP for not obtaining closure samples (see Section 1.2.6).

1.2.9 Administrative Building, Building 143, Parcel 37(7)

Building 143 is known as the Administrative Building (Figure 1-10). This location formerly housed one 4,000-gallon heating oil UST, which was removed and replaced with another 4,000-gallon UST in 1996. A closure report, prepared by Theta was reviewed and is included in Appendix A, Attachment 19 of the UST Summary Report (IT, 1999). Product odor was not detected within the excavation. The removed tank appeared to be in good condition. The depth to groundwater was estimated to be greater than five feet deeper than the bottom of the tank. This estimate was obtained from extending the excavation depth an additional five feet. Soil samples were collected and field screened for organic vapors. Groundwater samples were not collected. Evidence of contamination was not observed. Excavated soils were returned to the excavation upon completion of the tank removal. Attached to this closure report was a VECP for not obtaining closure samples (see Section 1.2.6).

1.2.10 Bivouac Area, B-44, Parcel 38(7)

Building B-44 is known as the Bivouac Area (Figure 1-11). This location housed one 1,000-gallon heating oil UST, which was removed but not replaced in 1996. A closure report, prepared by Theta, was reviewed and is included in Appendix A, Attachment 20 of the UST Summary Report (IT, 1999). Product odor was not detected within the excavation. The removed tank appeared to be in good condition. The depth to groundwater was estimated to be greater than 5 feet deeper than the bottom of the tank. This estimate was obtained from extending the



LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS
- TREES / TREELINE
- PARCEL BOUNDARY
- FENCE
- UTILITY POLE
- SS — SANITARY SEWER LINE
- SD — STORM DRAINAGE LINE
- UST — UNDERGROUND STORAGE TANK

FIGURE 1-9
SITE MAP
ADMINISTRATIVE BUILDING 141
PARCEL 36(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DWG. NO.: ...\783149es.008 | PROJ. NO.: 783149
INITIATOR: J. TARR | PROJ. MGR.: J. YACOUB
DRAFT. CHCK. BY: | ENGR. CHCK. BY: J. TARR
DATE LAST REV.: | DRAWN BY:
STARTNG DATE: 05/26/99 | DRAWN BY: D. BILLINGSLEY
24 JUN 1999 16:29:06
DBILLNG
c:\cadd\design\783149es.008

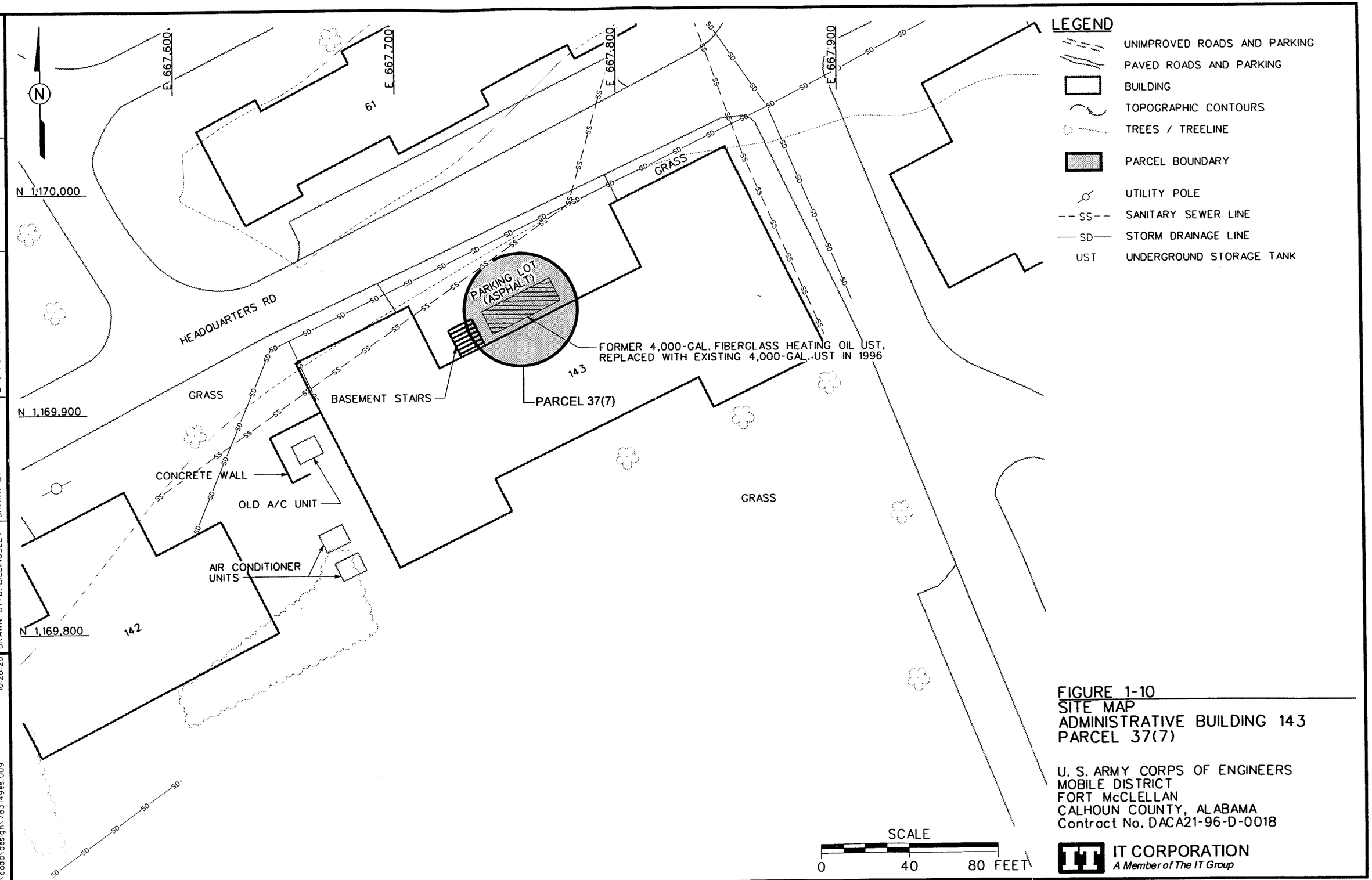


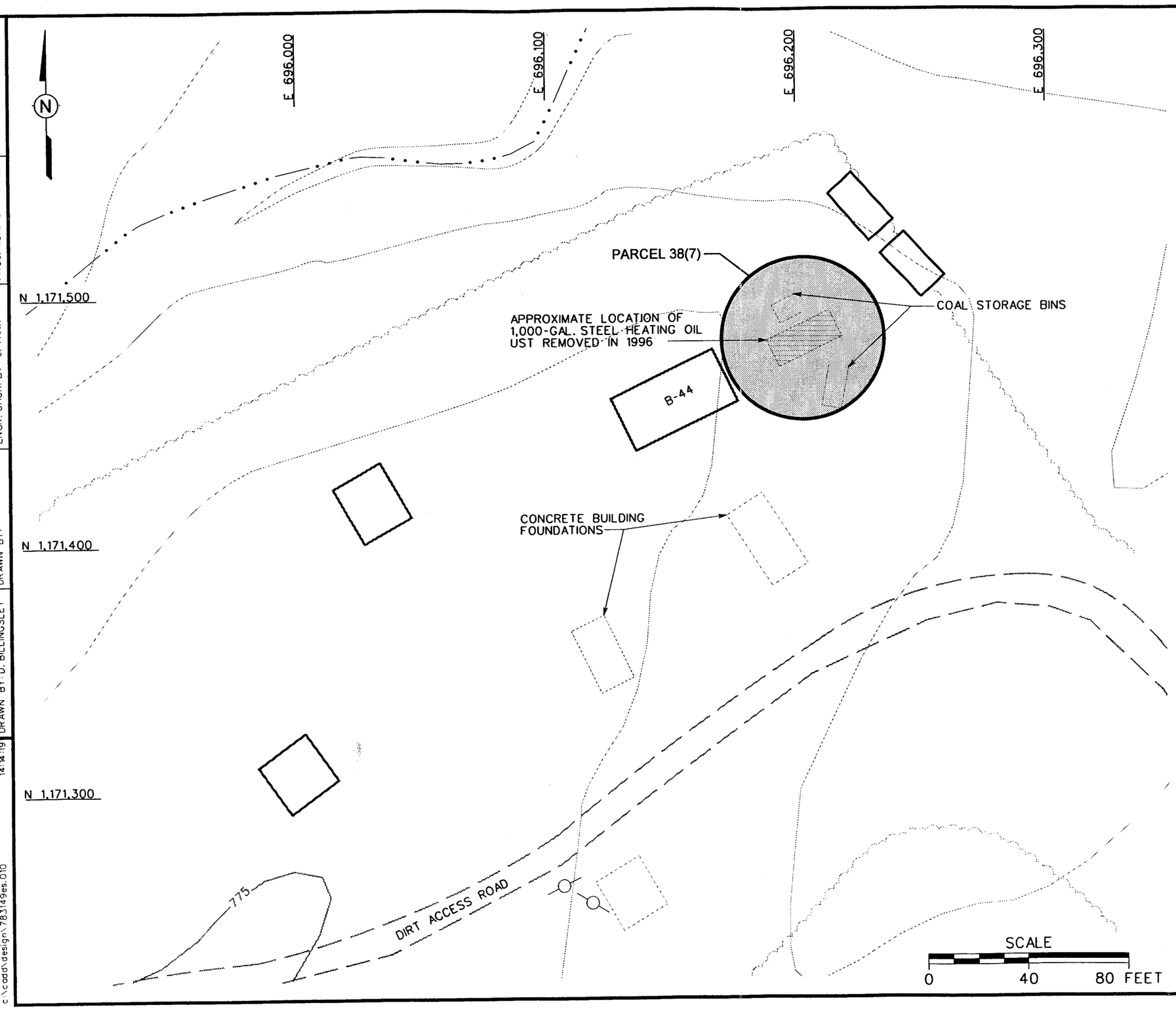
FIGURE 1-10
SITE MAP
ADMINISTRATIVE BUILDING 143
PARCEL 37(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

INITIATOR: J. TARR	DWG. NO.: ...\783149es.009
PROJ. MGR.: J. YACOUB	PROJ. NO.: 783149
DRAFT. CHCK. BY:	
ENGR. CHCK. BY: J. TARR	
DATE LAST REV.:	
DRAWN BY:	
STARTNG DATE: 05/26/99	
DRAWN BY: D. BILLINGSLEY	

28 JUN 1999 10:28:28
DBILLNG c:\cadd\design\783149es.009



LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS
- TREES / TREELINE
- PARCEL BOUNDARY
- SURFACE DRAINAGE / CREEK
- UTILITY POLE
- UST — UNDERGROUND STORAGE TANK

FIGURE 1-11
SITE MAP
BIVOUAC AREA, B-44
PARCEL 38(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DRAFT. CHCK. BY:
ENGR. CHCK. BY: J. TARR
INITIATOR: J. TARR
PROJ. MGR.: J. YACOUB
DWG. NO.: ...\78314 9es.010
PROJ. NO.: 783149
STARTING DATE: 05/25/99
DRAWN BY: D. BILLINGSLEY
DATE LAST REV.:
DRAWN BY:
07 JUL 1999 14:14:19
DBILLNG c:\cadd\design\783149es.010

excavation depth an additional five feet. Soil samples were collected and field screened. Groundwater samples were not collected. Evidence of contamination was not observed. Excavated soils were returned to the excavation upon completion of closure activities. Attached to this closure report was a VECP for not obtaining closure samples (see section 1.2.6). Building B-44, Parcel 38(7), falls within the "Possible Explosive Ordnance Impact Area" shown on Plate 10 of the FTMC Archive Search Report, Maps (USACE, 1998).

1.2.11 Former Clothing Building, Building 273, Parcel 39(7)

Building 273 has been demolished but was formerly known as the Clothing Building (Figure 1-12). The EBS documents that one 1,000-gallon heating oil UST was removed in 1991 and that a closure report was not on file. The tank was removed by IT on April 7, 1991. Six soil borings were advanced and soil samples collected for analysis in December 1990. The soil analytical results indicated that leakage from the UST had impacted the subsurface soils (see the UST Closure Report, Appendix D). Following the tank removal, soil samples were collected from the excavation and analyzed for TPH, total lead, TCLP lead, and BTEX (see the UST Closure Report, Table 1-3). Analytical results indicate that total lead concentrations ranged from 14 to 40 ppm while TCLP lead was below detection limit. TPH concentrations ranged from ND to 160 ppm. A sample from the bottom of the excavation was not collected. The depth to groundwater was not referenced in the field notes reviewed.

1.2.12 Noble Army Hospital, Building 292, Parcel 40(7)

Building 292 is known as the Noble Army Hospital (Figure 1-13). Tables 5.1-2 and 6-1 of the EBS reference the facility as having one 8,000-gallon heating oil tank, which was removed and replaced in 1996. The list of active USTs track this tank(s) under Building 294. A closure report prepared by Theta was reviewed and is included in Appendix A, Attachment 21 of the UST Summary Report (IT, 1999). The closure report references the removal and replacement of one 8,000-gallon heating oil UST for Building 294. A diesel odor was detected during this tank removal (Theta, 1996). Groundwater was determined to be greater than five feet below the base of the tank. This estimate was determined by extending the depth of the excavation an additional five feet. Upon the tank removal, a one-foot (in length) hole was noted on the top west end of the tank. The product piping was purged of product, capped, and left in place. Soils exhibiting evidence of contamination were segregated from non-contaminated soils and stockpiled for treatment by thermal volatilization. The excavated soils (approximately 492 yd^3) were sampled and analyzed for TPH. TPH concentrations were detected at 528 ppm. Soil samples collected for TPH analyses during closure assessment activities ranged from 56 ppm to 4,850 ppm. Groundwater sampling was not performed. The closure report contains a site map that references

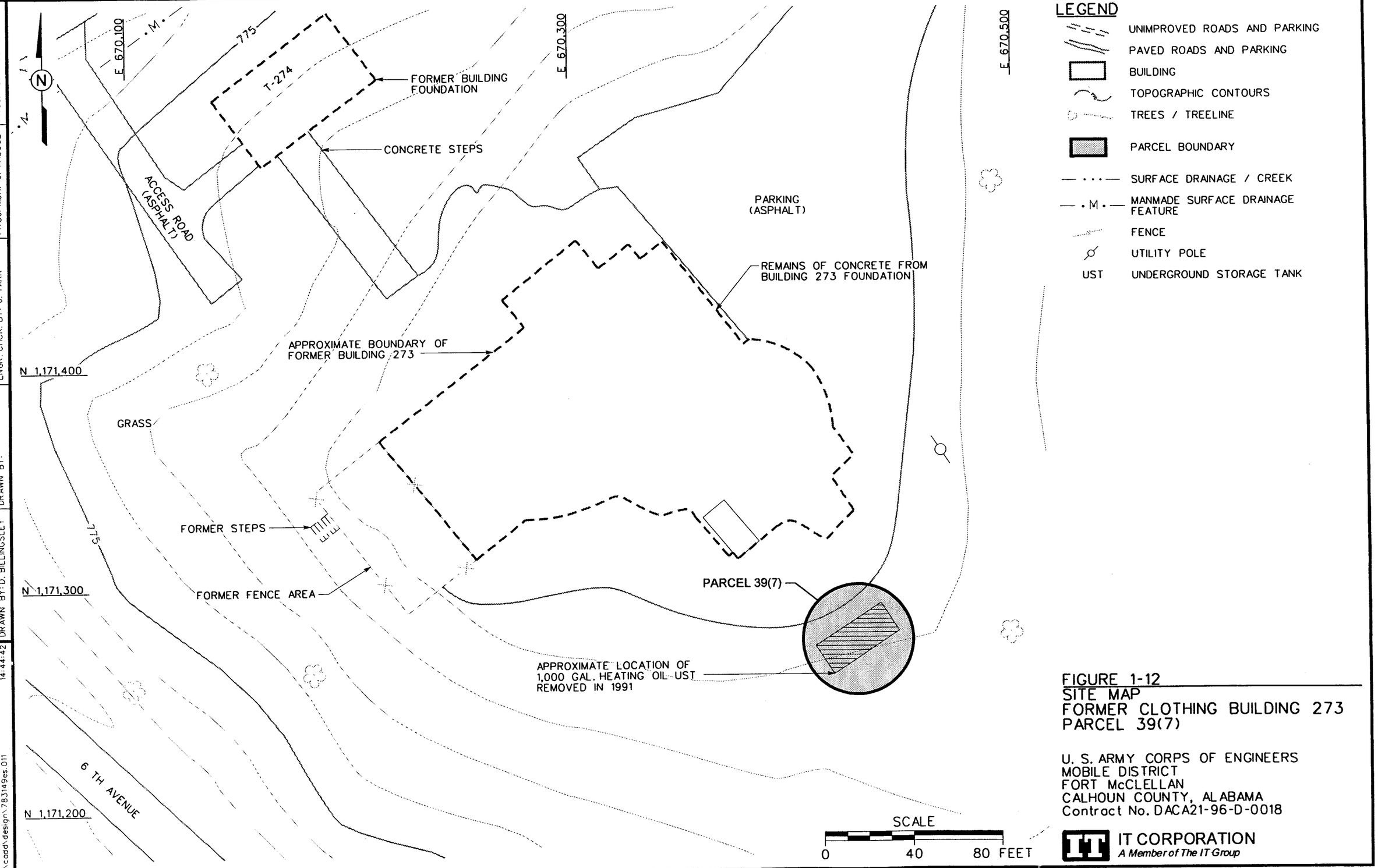


FIGURE 1-12
SITE MAP
FORMER CLOTHING BUILDING 273
PARCEL 39(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DRAFT. CHCK. BY:
ENGR. CHCK. BY: J. TARR
PROJ. MGR.: J. YACOUB
DRAWN BY: D. BILLINGSLEY
INITIATOR: J. TARR
STARTING DATE: 05/25/99
DWG. NO.: ...\783149es.011
PROJ. NO.: 783149
DATE LAST REV.:
DRAWN BY:
06 JUL 1999
14:44:42
DBILLNG
c:\cadd\design\783149es.011

E 669,800

E 670,000

E 670,200

N 1,172,900

N 1,172,800

N 1,172,700

292

294

ASPHALT

PARKING

PARKING

GRASS

GRASS

800

800

5 TH AVE

ELECTRICAL GENERATOR CELLS ON CONCRETE PAD

FORMER 8,000-GAL. UST REPLACED WITH EXISTING 8,000-GAL. HEATING OIL UST IN 1996

PARCEL 40(7)

SCALE

0 40 80 FEET

LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS
- TREES / TREELINE
- PARCEL BOUNDARY
- UTILITY POLE
- SS SANITARY SEWER LINE
- SD STORM DRAINAGE LINE
- UST UNDERGROUND STORAGE TANK

FIGURE 1-13
SITE MAP
NOBLE army HOSPITAL
BUILDING 292
PARCEL 40(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DRAFT. CHCK. BY:	INITIATOR: J. TARR
ENGR. CHCK. BY: J. TARR	PROJ. MGR.: J. YACOUB
STARTING DATE: 05/25/99	DATE LAST REV.:
DRAWN BY: D. BILLINGSLEY	DRAWN BY:
13 JUL 1999 15:23:16	DBILLING c:\coda\design\783149es.012
DWG. NO.: ...\783149es.012	
PROJ. NO.: 783149	

the location, depth, and TPH concentrations of samples collected. In general, the eastern and southern sides of the tank exhibited TPH concentrations greater than 1,000 ppm. Based on the closure report, it appears that the vertical and horizontal extent of petroleum contamination has not been defined. There is not any record of the disposal of the excavated soil.

1.2.13 Former Building 796, Parcel 43(7)

Building 796 has been demolished (Figure 1-14). This location formerly had a 1,000-gallon heating oil UST associated with it. The tank was removed in February 1996. A closure report prepared by Theta was reviewed and is included in Appendix A, Attachment 24 of the UST Summary Report (IT, 1999). The closure report documented that a mild product odor was detected within the excavation. An examination of the removed tank noted that the tank was in good condition. The depth to groundwater was estimated to be greater than five feet below the base of the excavation. This depth was determined by topographical features. Soil samples were collected and field screened for organic vapors. Contaminated soils were excavated and stockpiled. Stockpiled soils were sampled and analyzed for TPH. Analytical results indicate TPH concentrations of 193 ppm. Groundwater samples were not collected. Soils not exhibiting evidence of contamination were used to backfill the excavation. Approximately 21 yd^3 of contaminated soils were stockpiled to await treatment/disposal. Attached to this closure report was a VECP for not obtaining closure samples (see Section 1.2.6).

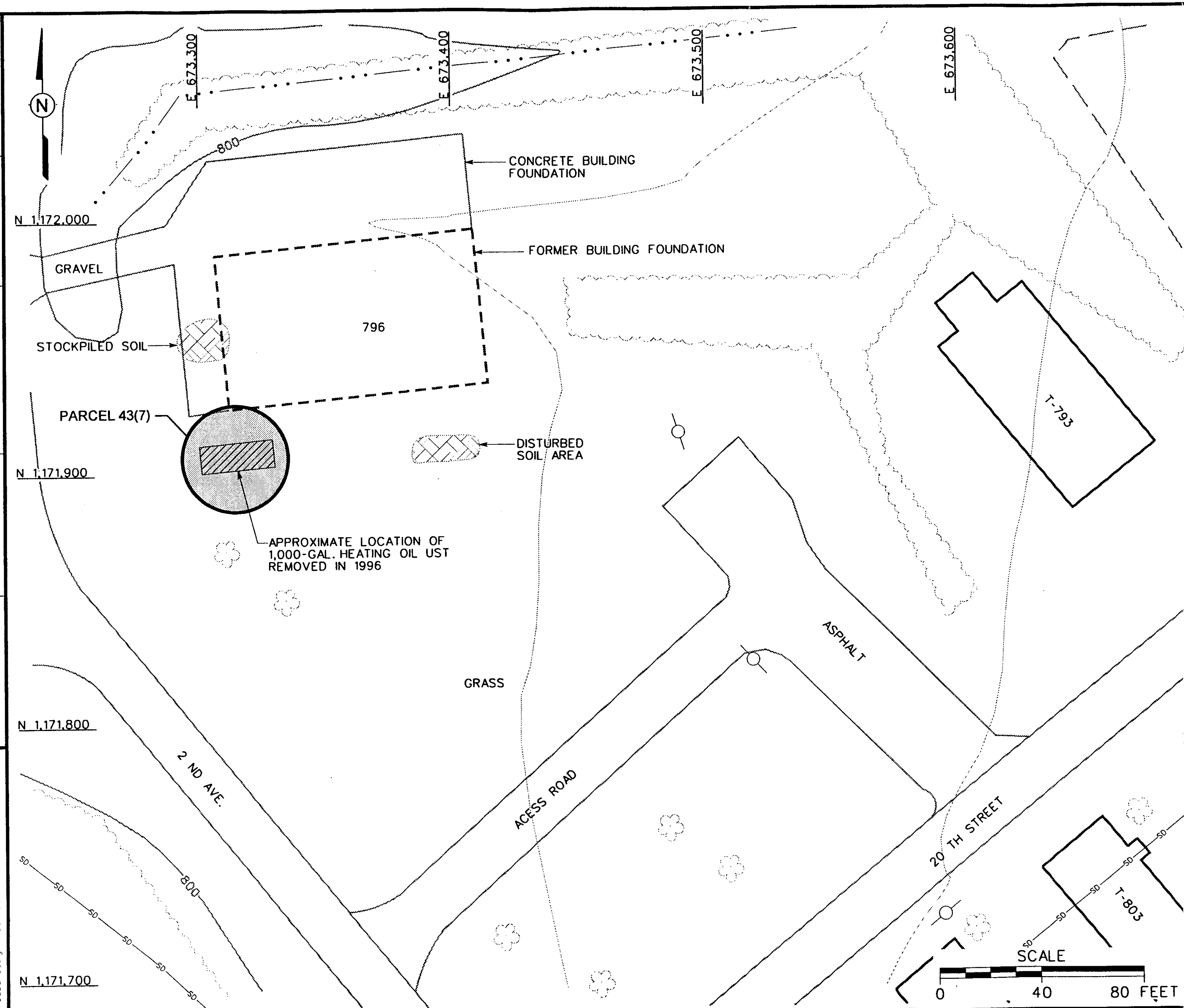
1.2.14 Former Building 1201, Parcel 44(7)

Building 1201 has been demolished (Figure 1-15). This location formerly had a 1,000-gallon heating oil UST associated with it. A closure report, prepared by Theta, was reviewed and is included in Appendix A, Attachment 25 of the UST Summary Report (IT, 1999). The closure report references the removal of one 1,000-gallon UST in February 1996. A mild diesel odor was detected during this tank removal. Groundwater was determined to be greater than 5 feet below the base of the tank. This depth to water was estimated by extending the depth of the excavation an additional five feet. The tank appeared to be in good condition upon removal. Soils exhibiting evidence of contamination were segregated from non-contaminated soils and stockpiled. The excavated contaminated soils (approximately 26.4 yd^3) were sampled and analyzed for TPH. Analytical results indicate TPH concentrations were detected at 250 ppm. Soil samples collected and analyzed for TPH during closure assessment activities ranged from 20 ppm to 13,000 ppm. Groundwater sampling was not performed. The closure report contains a site map that references the location, depth, and TPH concentrations of samples collected. In general, only the eastern and western walls of the excavation were sampled and analyzed. The samples collected from the west wall contained the highest concentration. Attached to this

DWG. NO.: ...\783149es.013	PROJ. NO.: 783149
INITIATOR: J. TARR	PROJ. MGR.: J. YACOUB
DRAFT. CHCK. BY:	ENGR. CHCK. BY: J. TARR
DATE LAST REV.:	DRAWN BY:
STARTING DATE: 05/27/99	DRAWN BY: D. BILLINGSLEY

07 JUL 1999 10:10:22

DBILLING c:\cadd\design\783149es.013



LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS
- TREES / TREELINE
- PARCEL BOUNDARY
- SURFACE DRAINAGE / CREEK
- UTILITY POLE
- —SD— STORM DRAINAGE LINE
- UST UNDERGROUND STORAGE TANK

FIGURE 1-14
SITE MAP
FORMER BUILDING 796
PARCEL 43(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

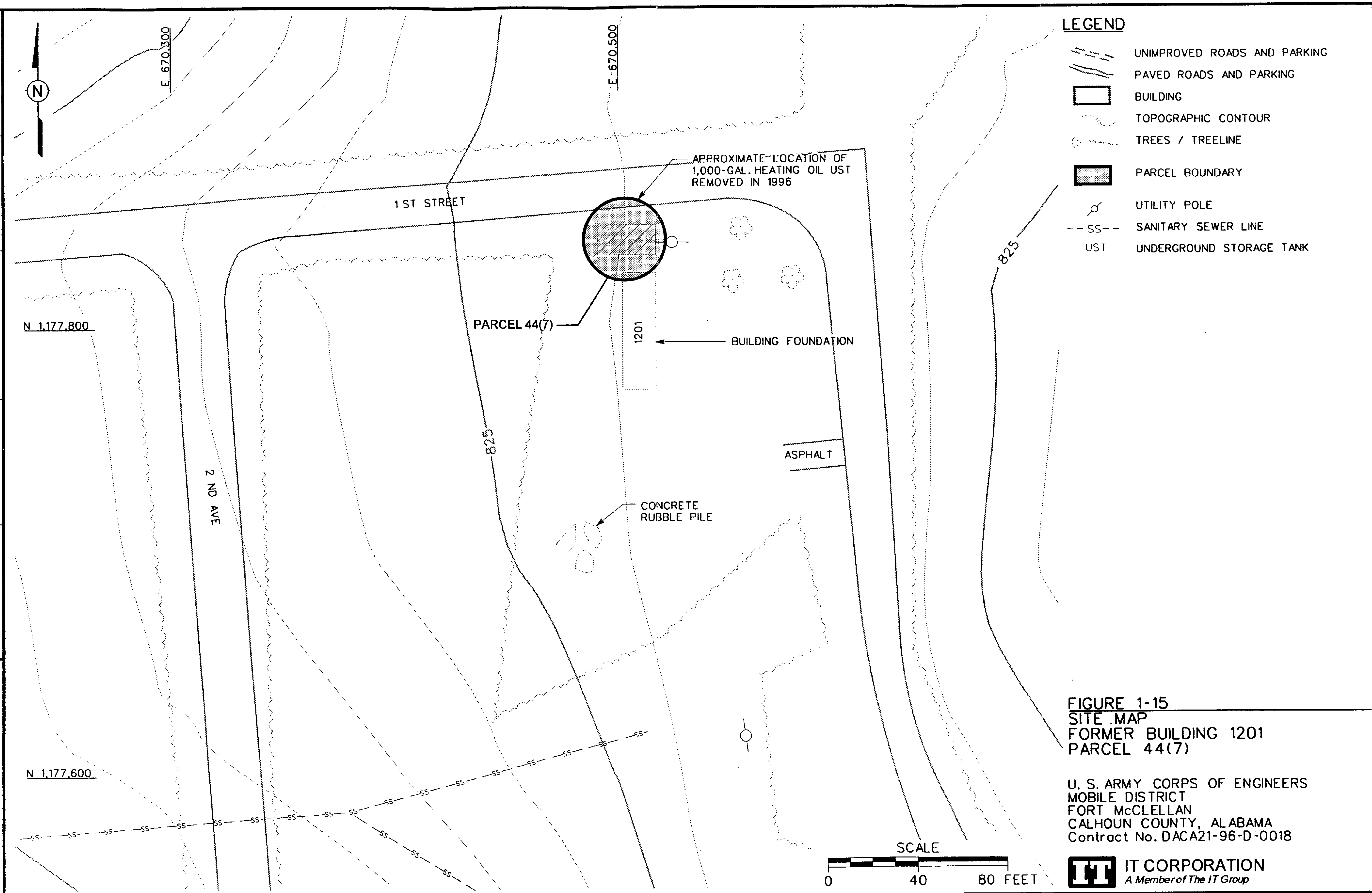


FIGURE 1-15
SITE MAP
FORMER BUILDING 1201
PARCEL 44(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DWG. NO.: ...\783149es.014
PROJ. NO.: 783149
INITIATOR: J. TARR
PROJ. MGR.: J. YACOUB
DRAFT. CHCK. BY:
ENGR. CHCK. BY: J. TARR
DATE LAST REV.:
DRAWN BY:
STARTING DATE: 05/27/99
DRAWN BY: D. BILLINGSLEY

07 JUL 1999 10:15:14
DBILLING c:\cadd\design\783149es.014

DWG. NO.: ...\78314 9es.015
PROJ. NO.: 783149
INITIATOR: J. TARR
PROJ. MGR.: J. YACOUB
DRAFT. CHCK. BY:
ENGR. CHCK. BY: J. TARR
DATE LAST REV.:
DRAWN BY:
STARTNG DATE: 05/27/99
DRAWN BY: D. BILLINGSLEY
07 JUL 1999 14:30:41
DBILLNG c:\cadd\design\783149es.015

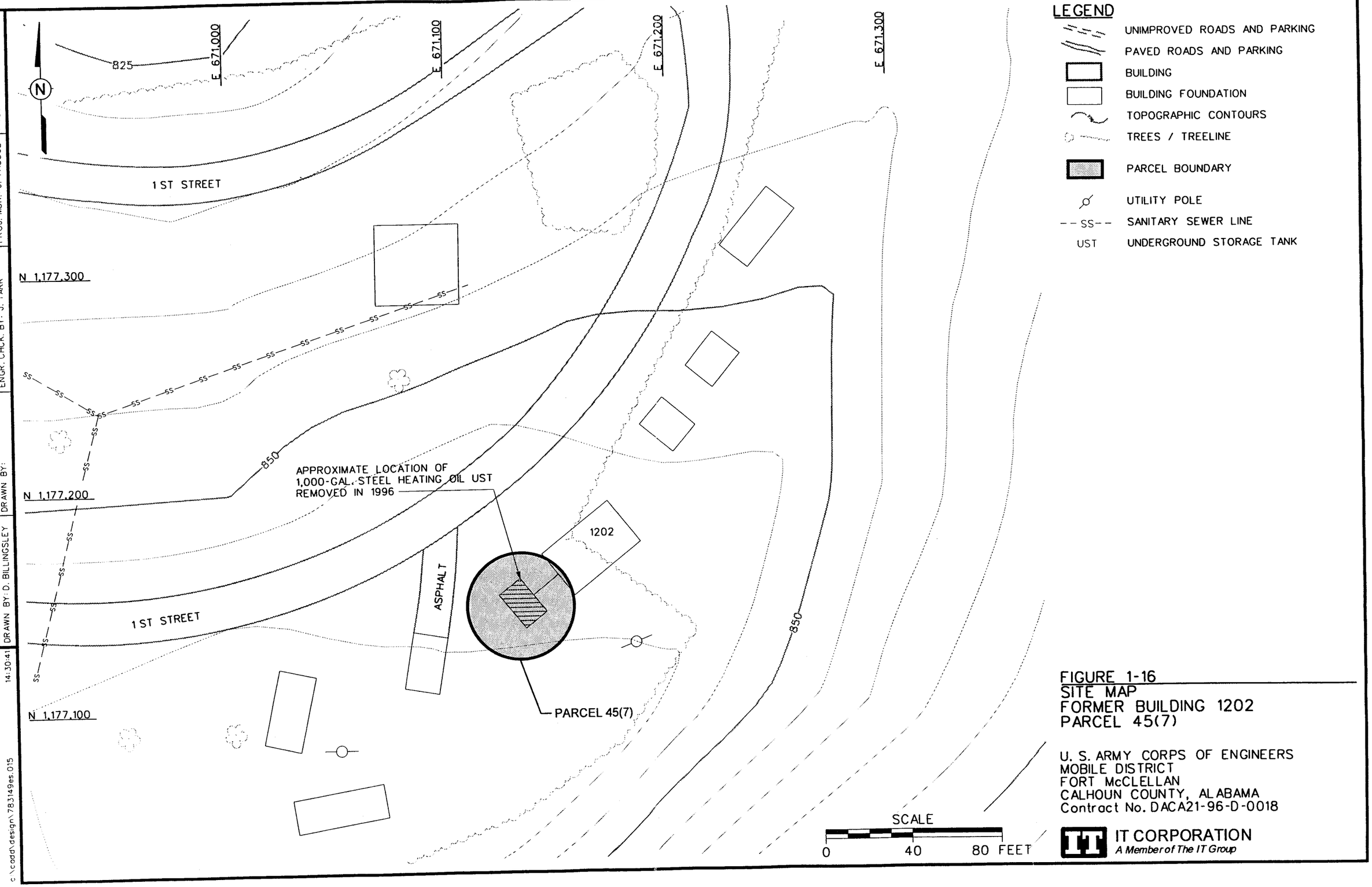


FIGURE 1-16
SITE MAP
FORMER BUILDING 1202
PARCEL 45(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

closure report was a VECP for not obtaining closure samples (see section 1.2.6). The Former Building 1201, Parcel 44(7), falls within the "Possible Explosive Ordnance Impact Area" shown on Plate 10 of the FTMC Archive Search Report, Maps (USACE, 1998).

1.2.15 Former Building 1202, Parcel 45(7)

Building 1202 has been demolished (Figure 1-16). This location formerly had a 1,000-gallon heating oil UST associated with it. The tank was removed in February 1996. A closure report, prepared by Theta Engineering Inc., was reviewed and is included in Appendix A, Attachment 26 of the UST Summary Report (IT, 1999). The closure report documented that a mild product odor was detected within the excavation. Examination of the removed tank noted that the tank was in good condition. The depth to groundwater was estimated to be greater than five feet below the base of the excavation. This depth was determined by topographical features. Soil samples were collected and field screened for organic vapors. Contaminated soils were excavated and stockpiled. Stockpiled soils were sampled and analyzed. TPH concentrations of 1,056 ppm were detected. Groundwater samples were not collected. Soils not exhibiting evidence of contamination were used to backfill the excavation. Approximately 23.7 yd^3 of contaminated soils were stockpiled to await treatment/disposal. Attached to this closure report was a VECP for not obtaining closure samples (see Section 1.2.6). The Former Building 1202, Parcel 45(7), falls within the "Possible Explosive Ordnance Impact Area" shown on Plate 10 of the FTMC Archive Search Report, Maps (USACE, 1998).

1.2.16 Bowling Alley, Building 1928, Parcel 48(7)

Building 1928 is known as the Bowling Alley (Figure 1-17). One 1,000-gallon heating oil tank and product lines were removed and replaced in 1996. A closure report, prepared by Theta was reviewed and is included in Appendix A, Attachment 28 of the UST Summary Report (IT, 1999). The closure report documented that a product odor was not detected within the excavation. An examination of the removed tank noted that the tank was in good condition. The depth to groundwater was estimated to be greater than 5 feet below the base of the excavation. This depth was determined by extending the excavation an additional 5 feet. Soil samples were not collected. The report notes that evidence of contamination was not observed. Approximately 116 yd^3 of soils, which included soils excavated for the new tank installation, was transported to the FTMC construction landfill as per the closure report. Attached to this closure report was a VECP for not obtaining closure samples (see Section 1.2.6).

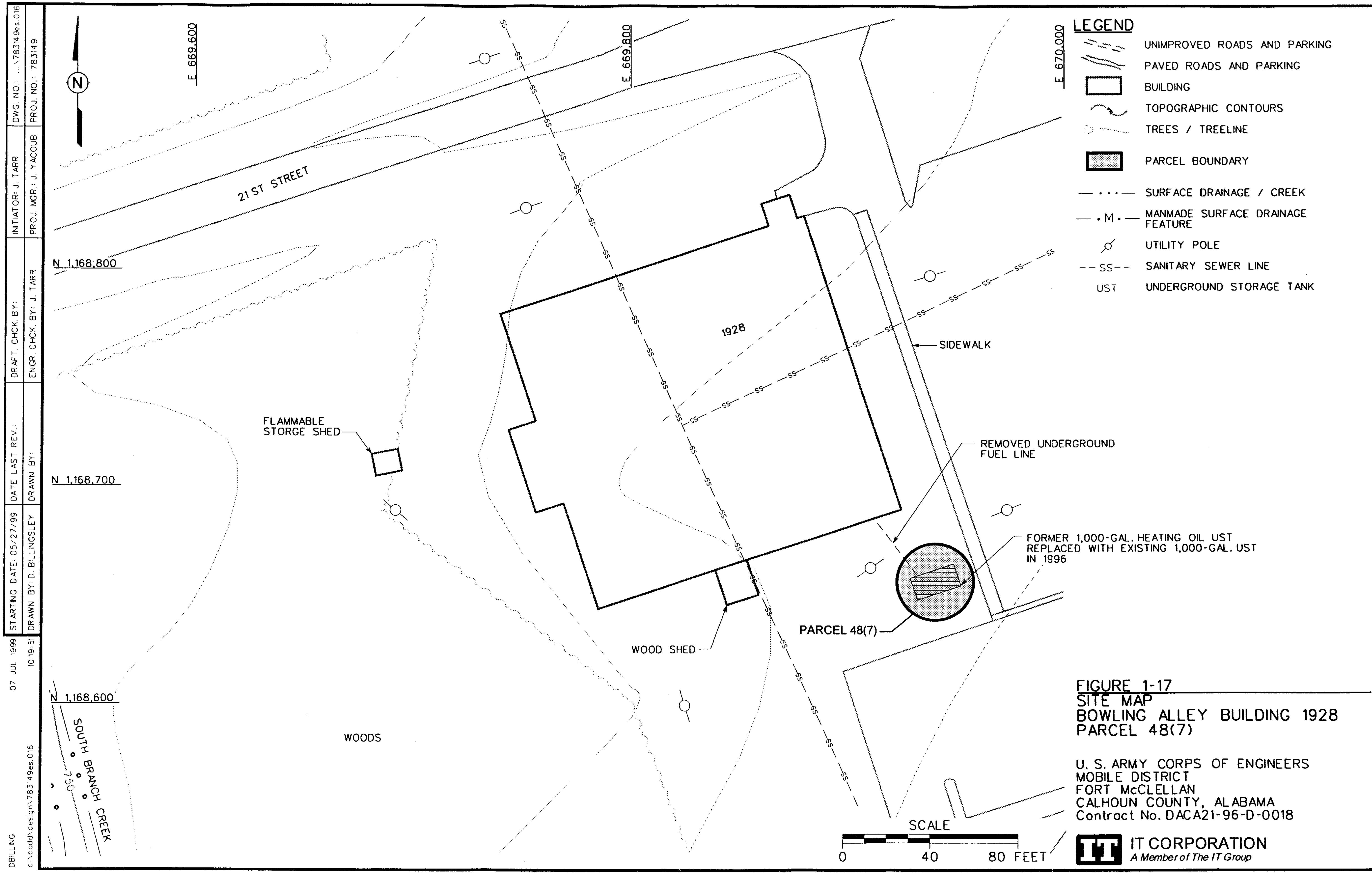

DWG. NO.: ...\783149es.016
PROJ. NO.: 783149
INITIATOR: J. TARR
PROJ. MGR.: J. YACOUB
DRAFT. CHCK. BY:
ENGR. CHCK. BY: J. TARR
DATE LAST REV.:
DRAWN BY:
STARTING DATE: 05/27/99
DRAWN BY: D. BILLINGSLEY
07 JUL 1999
10:19:51
DBILLING
c:\cadd\design\783149es.016
N
E 669,600
E 669,800
E 670,000
N 1,168,800
N 1,168,700
N 1,168,600
21 ST STREET
1928
SIDEWALK
FLAMMABLE STORGE SHED
WOOD SHED
WOODS
SOUTH BRANCH CREEK
750
REMOVED UNDERGROUND FUEL LINE
FORMER 1,000-GAL. HEATING OIL UST REPLACED WITH EXISTING 1,000-GAL. UST IN 1996
PARCEL 48(7)
LEGEND
UNIMPROVED ROADS AND PARKING
PAVED ROADS AND PARKING
BUILDING
TOPOGRAPHIC CONTOURS
TREES / TREELINE
PARCEL BOUNDARY
SURFACE DRAINAGE / CREEK
M
MANMADE SURFACE DRAINAGE FEATURE
UTILITY POLE
SS
SANITARY SEWER LINE
UST
UNDERGROUND STORAGE TANK
SCALE
0
40
80 FEET
U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018
IT CORPORATION
A Member of The IT Group

FIGURE 1-17
SITE MAP
BOWLING ALLEY BUILDING 1928
PARCEL 48(7)

1.2.17 Dental Clinic, Building 1929, Parcel 49(7)

Building 1929 is the Dental Clinic (Figure 1-18). One 1,500-gallon heating oil UST was removed and replaced with a 1,000-gallon UST in 1996. A closure report, prepared by Theta, was reviewed and is included in the UST Summary Report, Appendix A, Attachment 29 (IT, 1999). The closure report documented that a product odor was not detected within the excavation. An examination of the removed tank noted that the tank was in good condition. The depth to groundwater was estimated to be greater than five feet below the base of the excavation. This depth was determined by extending the excavation an additional five feet. Soil samples were not collected. The report notes that evidence of contamination was not observed. Approximately 131 yd^3 of soils, which included soils excavated for the new tank installation, was transported to the FTMC construction landfill as per the closure report. Attached to this closure report was a VECP for not obtaining closure samples (see Section 1.2.6).

1.2.18 PX, Building 1965, Parcel 50(7)

Building 1965 is known as the PX Building (Figure 1-19). A closure report, prepared by Theta, was reviewed and is included in the UST Summary Report, Appendix A, Attachment 30 (IT, 1999). The report references that one 3,000-gallon heating oil UST was closed in place in 1996. One soil boring was advanced to 20 feet bls with continuous split spoon sampling. Each sample was field screened with a PID. Evidence of contamination was not detected. Groundwater was determined to be greater than 20 feet bls. Soil and groundwater sampling were not conducted.

1.2.19 Post Office, Building 1966, Parcel 51(7)

Building 1966 is known as the Post Office (Figure 1-20). A closure report, prepared by Southern Environmental Management & Specialties, Inc. (SEMS), was reviewed and is included in the UST Summary Report, Appendix A, Attachment 7 (IT, 1999). The closure report references the closure of one 1,000-gallon heating oil UST and replacement with a second 1,000-gallon UST. The tank was closed in place by filling it with cement grout. Soil samples were collected from soil borings and field screened. Groundwater was determined to be greater than 5 feet below the base of the tank. This was determined during excavation of the new tank. Soil samples did not indicate the presence of contamination.

DRAFT. CHCK. BY:
ENGR. CHCK. BY: J. TARR
INITIATOR: J. TARR
PROJ. MGR.: J. YACOUB
DWG. NO.: ...\783149es.017
PROJ. NO.: 783149
DATE LAST REV.:
DRAWN BY:
STARTING DATE: 05/27/99
DRAWN BY: D. BILLINGSLEY
07 JUL 1999 10:23:43
DBILLNG c:\cadd\design\783149es.017

N

E 670,800

E 670,900

E 671,000

E 671,100

N 1,168,800

N 1,168,700

N 1,168,600

PARKING

8 TH AVE

775

FORMER 1,500-GAL. STEEL UST
REPLACED WITH EXISTING
1,000-GAL. HEATING OIL UST
IN 1996

BRICK WALL

DENTAL CLINIC

1929

PARCEL 49(7)

ASPHALT ROAD

PARKING

SCALE

0 40 80 FEET

LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS
- TREES / TREELINE
- PARCEL BOUNDARY
- UTILITY POLE
- --SS-- SANITARY SEWER LINE
- —SD— STORM DRAINAGE LINE
- UST UNDERGROUND STORAGE TANK

FIGURE 1-18
SITE MAP
DENTAL CLINIC BUILDING 1929
PARCEL 49(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DRAFT. CHCK. BY:
ENGR. CHCK. BY: J. TARR
INITIATOR: J. TARR
PROJ. MGR.: J. YACOUB
DWG. NO.: ...\783149es.018
PROJ. NO.: 783149
DATE LAST REV.:
DRAWN BY:
STARTING DATE: 05/27/99
DRAWN BY: D. BILLINGSLEY
07 JUL 1999 10:26:20
DBILLNG c:\cadd\design\783149es.018

E 670,500

E 670,700

E 670,900

N 1,169,000

N 1,168,900

N 1,168,800

N

50

775

8 TH AVE

PARKING

COMMISSARY
2041

ASPHALT

1965

ABOVEGROUND GRILL
ON CONCRETE PAD

APPROXIMATE LOCATION OF
3,000-GAL. STEEL UST
CLOSED IN PLACE IN 1996

PARCEL 50(7)

BRICK WALL

CONCRETE PAD

LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS
- TREES / TREELINE
- PARCEL BOUNDARY
- UTILITY POLE
- SD — STORM DRAINAGE LINE
- UST — UNDERGROUND STORAGE TANK

SCALE
0 40 80 FEET

FIGURE 1-19
SITE MAP
PX BUILDING 1965
PARCEL 50(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DRAFT. CHCK. BY:
ENGR. CHCK. BY: J. TARR
INITIATOR: J. TARR
PROJ. MGR.: J. YACOUB
DWG. NO.: ...\78314 9es 019
PROJ. NO.: 783149
STARTING DATE: 05/27/99
DRAWN BY: D. BILLINGSLEY
DATE LAST REV.:
DRAWN BY:
07 JUL 1999
10:29:33
DBILLNG
c:\cadd\design\783149es.019

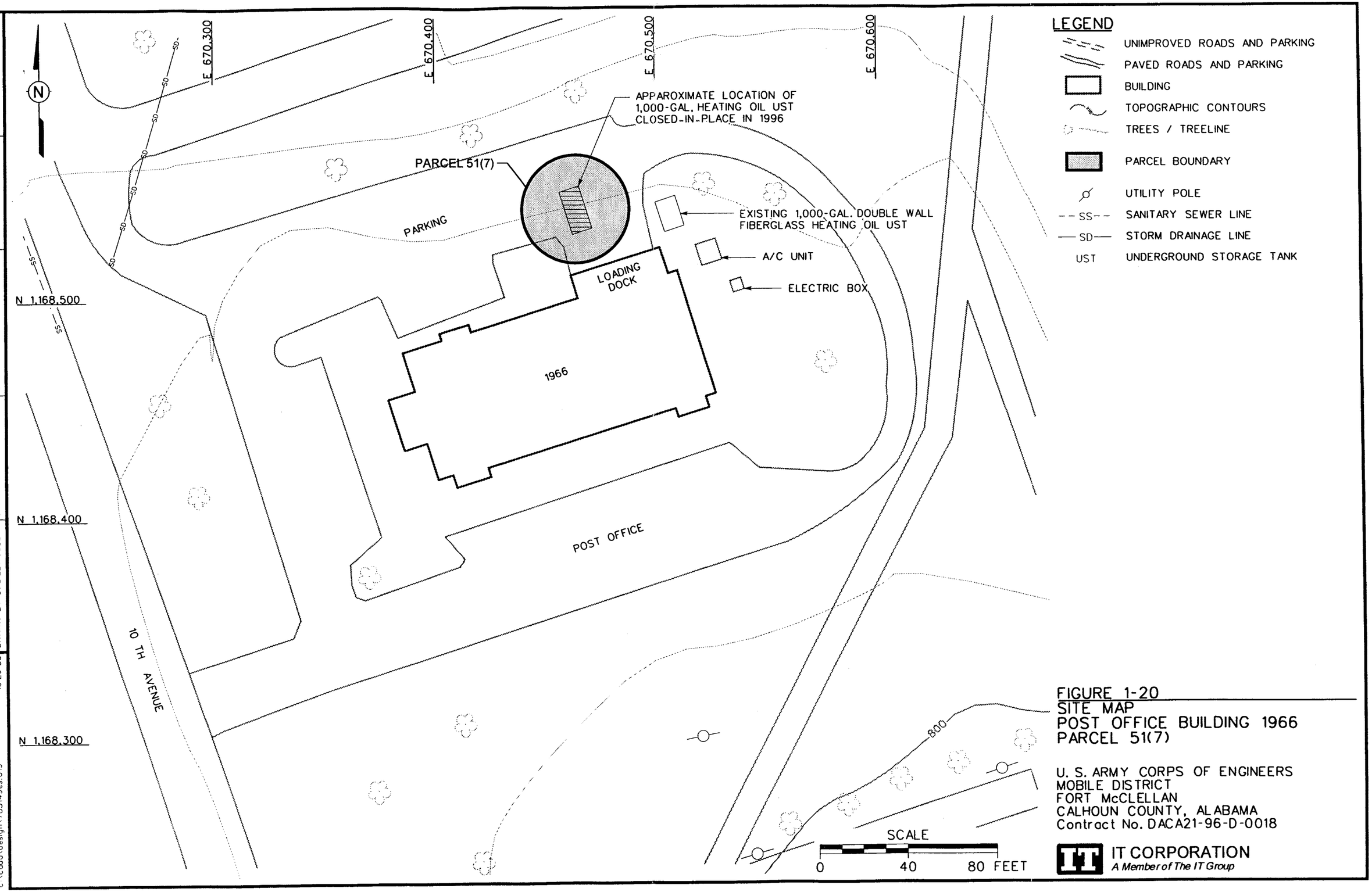


FIGURE 1-20
SITE MAP
POST OFFICE BUILDING 1966
PARCEL 51(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

1.2.20 Barracks, Building 3131, Parcel 54(7)

Building 3131 is known as the Barracks (Figure 1-21). One 20,000-gallon heating oil tank was removed in 1996. A closure report, prepared by Theta, was reviewed and is included in the UST Summary Report, Appendix A, Attachment 32 (IT, 1999). The closure report documented that product odor was not detected within the excavation. An examination of the removed tank noted that the tank was in good condition. The depth to groundwater was estimated to be 11.5 feet bls (depth groundwater entered the excavation). Neither soil nor groundwater samples were collected. The report notes that evidence of contamination was not observed. Approximately 32 yd^3 of water saturated soils were transported to the FTMC Borrow Pit. The remaining soils were returned to the excavation. Attached to this closure report was a VECP for not obtaining closure samples (see Section 1.2.6). The Barracks, Building 3131, Parcel 54(7), falls within the "Possible Explosive Ordnance Impact Area" shown on Plate 10 of the FTMC Archive Search Report, Maps (USACE, 1998).

1.2.21 Headquarters, Building 3161, Parcel 55(7)

Building 3161 is known as Headquarters (Figure 1-22). One 1,000-gallon heating oil tank was removed in 1996. A closure report, prepared by Theta, was reviewed and is included in the UST Summary Report, Appendix A, Attachment 33 (IT, 1999). The closure report documented that product odor was not detected within the excavation. An examination of the removed tank noted that the tank was in good condition. The depth to groundwater was reported to be unknown. Neither soil nor groundwater samples were collected. The report notes that evidence of contamination was not observed. Approximately 12.2 yd^3 of soils were excavated during the removal action, and returned to the excavation. Attached to this closure report was a VECP for not obtaining closure samples (see Section 1.2.6). The Headquarters, Building 3161, Parcel 55(7), falls within the "Possible Explosive Ordnance Impact Area" shown on Plate 10 of the FTMC Archive Search Report, Maps (USACE, 1998).

1.2.22 Community Club, Building 3212, Parcel 56(7)

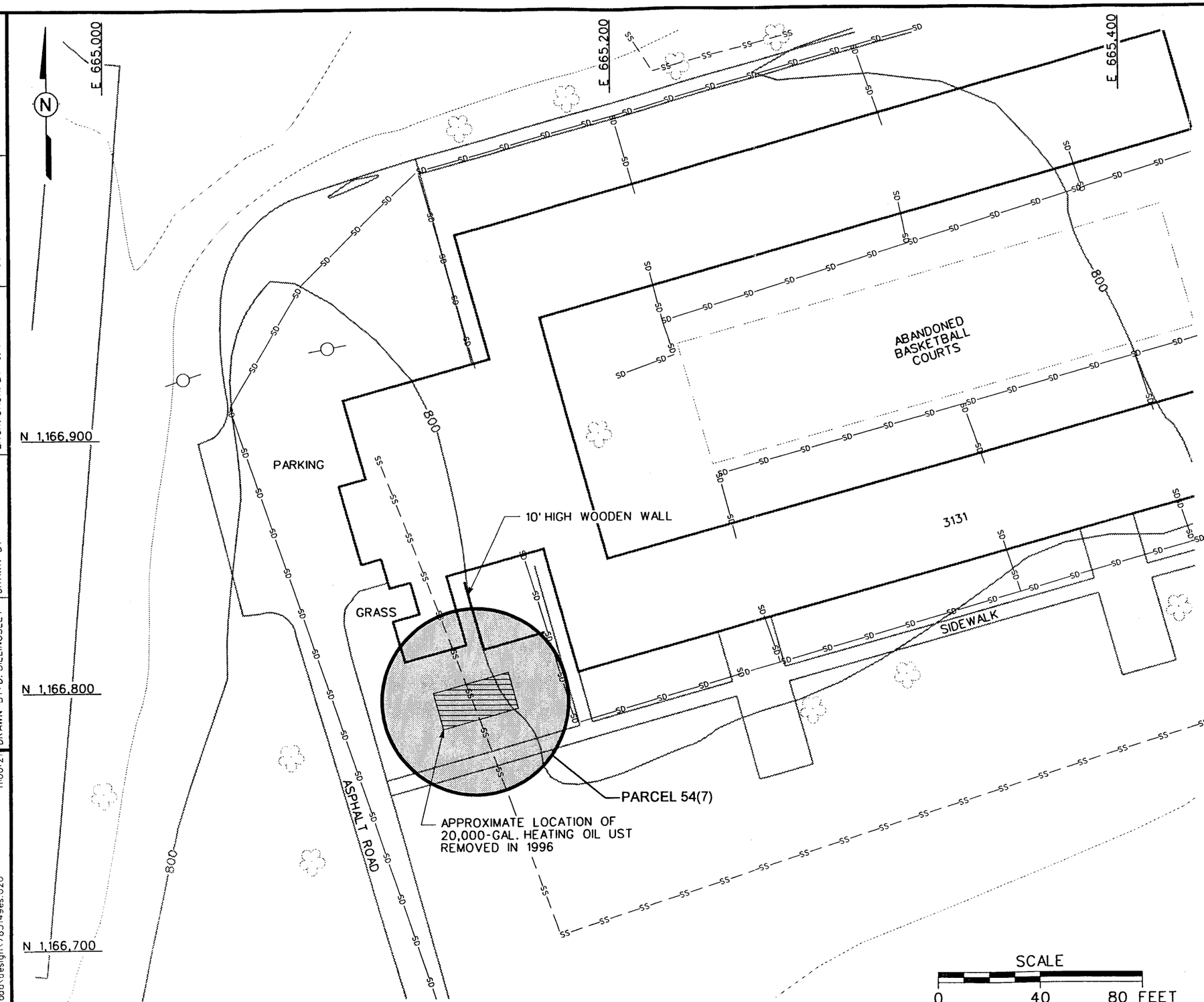
Building 3212 is known as the NCO Club (Figure 1-23). One 2,500-gallon heating oil tank was closed in place and replaced with another 2,500-gallon tank in 1996. A closure report, prepared by SEMS, Inc. was reviewed and is included in the UST Summary Report, Appendix A, Attachment 7 (IT, 1999). The depth to groundwater was determined to be greater than five feet below the bottom of the tank during the installation of the new tank. Neither soil nor groundwater samples were collected.

DRAFT. CHCK. BY:	INITIATOR: J. TARR	DWG. NO.: ...\78314 9es 020	
ENGR. CHCK. BY: J. TARR	PROJ. MGR.: J. YACOUB	PROJ. NO.: 783149	
STARTNG DATE: 05/27/99	DATE LAST REV.:		
DRAWN BY: D. BILLINGSLEY	DRAWN BY:		

07 JUL 1999 11:00:21

DBILLING

c:\cadd\design\783149es.020



LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS
- TREES / TREELINE
- PARCEL BOUNDARY
- UTILITY POLE
- -- SS -- SANITARY SEWER LINE
- — SD — STORM DRAINAGE LINE
- UST UNDERGROUND STORAGE TANK

SCALE
0 40 80 FEET

FIGURE 1-21
SITE MAP
BARRACKS BUILDING 3131
PARCEL 54(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

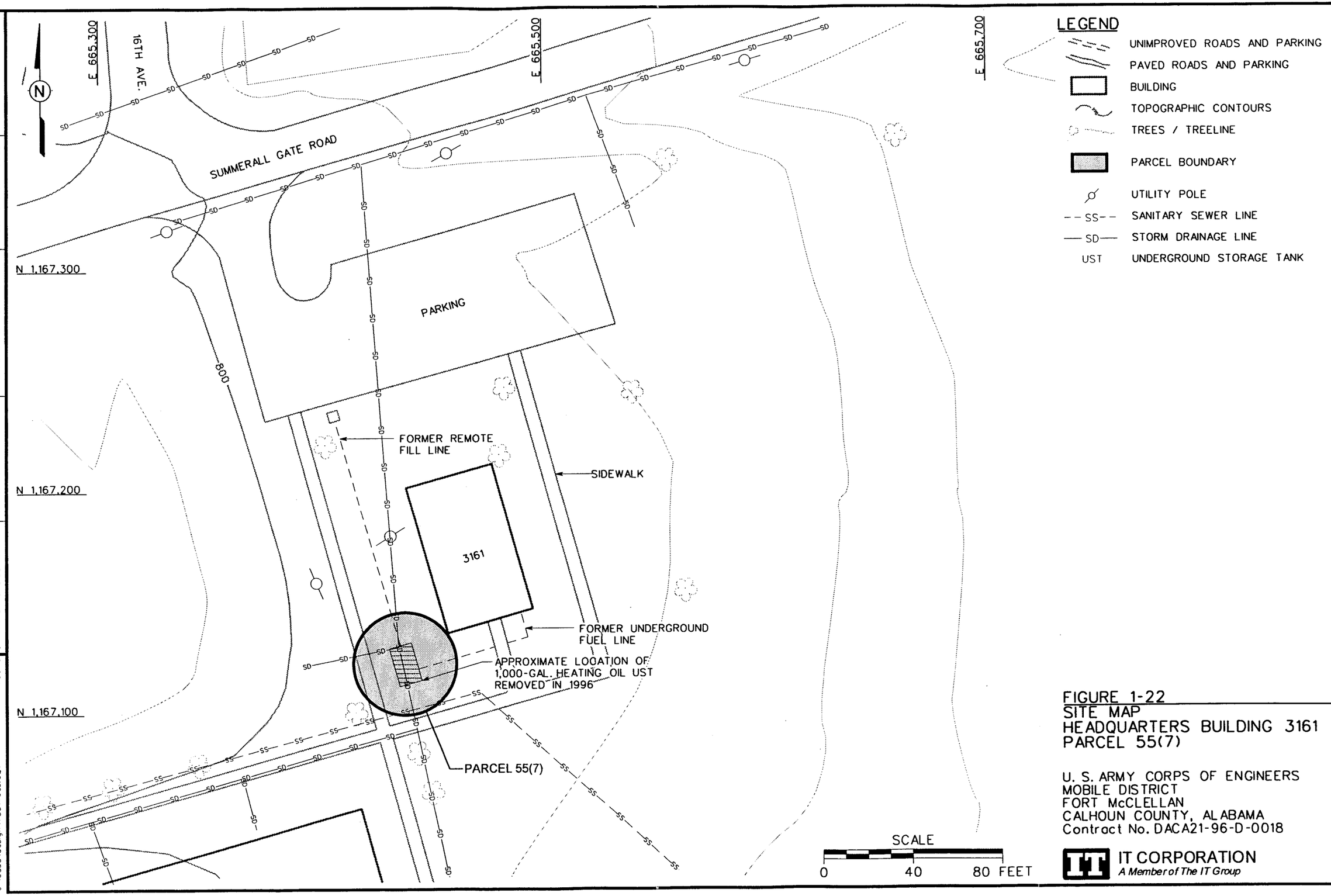


FIGURE 1-22
SITE MAP
HEADQUARTERS BUILDING 3161
PARCEL 55(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DRAFT. CHCK. BY:	
ENGR. CHCK. BY: J. TARR	
INITIATOR: J. TARR	
PROJ. MGR.: J. YACOUB	
DWG. NO.: ...\783149es.021	
PROJ. NO.: 783149	
STARTING DATE: 05/27/99	DATE LAST REV.:
DRAWN BY: D. BILLINGSLEY	DRAWN BY:
07 JUL 1999 11:08:13	
DBILLING c:\cadd\design\783149es.021	

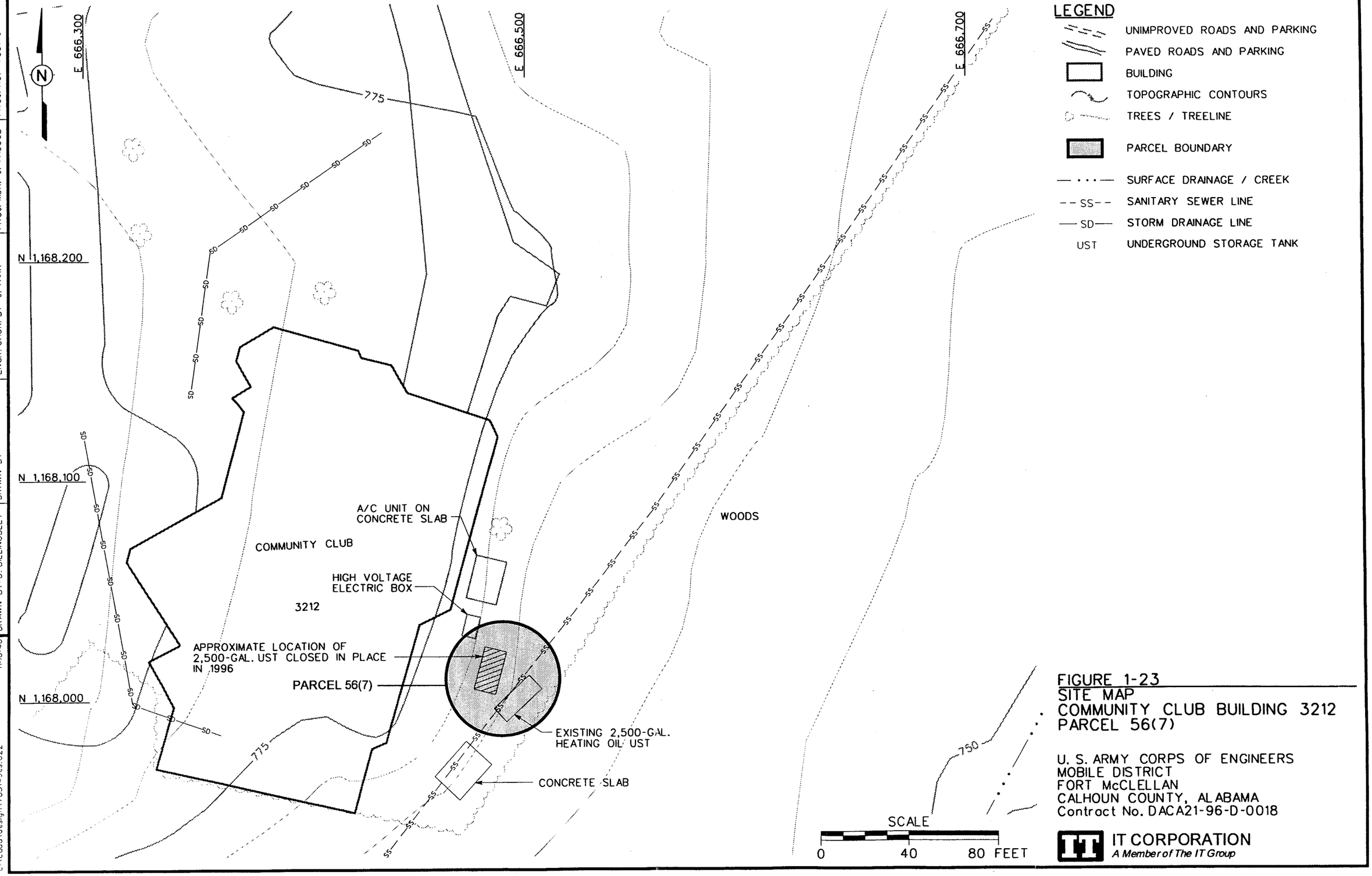


FIGURE 1-23
SITE MAP
COMMUNITY CLUB BUILDING 3212
PARCEL 56(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DRAWN BY: D. BILLINGSLEY | DATE LAST REV.:
STARTING DATE: 05/27/99 | DRAWN BY:
INITIATOR: J. TARR | DWG. NO.: ...\78314 9es.022
PROJ. MGR.: J. YACOUB | PROJ. NO.: 783149
ENGR. CHCK. BY: J. TARR | DRAFT. CHCK. BY:
07 JUL 1999 11:10:46
DBILLING
c:\cadd\design\783149es.022

1.2.23 Recreation Center, Building 3213, Parcel 57(7)

Building 3213 is known as the Recreation Center (Figure 1-24). One 4,000-gallon heating oil UST was removed in 1996. A closure report, prepared by SEMS, Inc., was reviewed and is included in the UST Summary Report, Appendix A, Attachment 7 (IT, 1999). The closure report documented that product odor was not detected within the excavation. An examination of the removed tank noted that the tank was in good condition. The depth to groundwater was reported to be greater than 5 feet below the bottom of the tank. This was determined by extending the excavation an additional 5 feet. Neither soil nor groundwater samples were collected. The report notes that evidence of contamination was not observed. Approximately 60 yd^3 soil was excavated during the UST removal action, and returned to the excavation.

1.2.24 Chapel, Building 3293, Parcel 58(7)

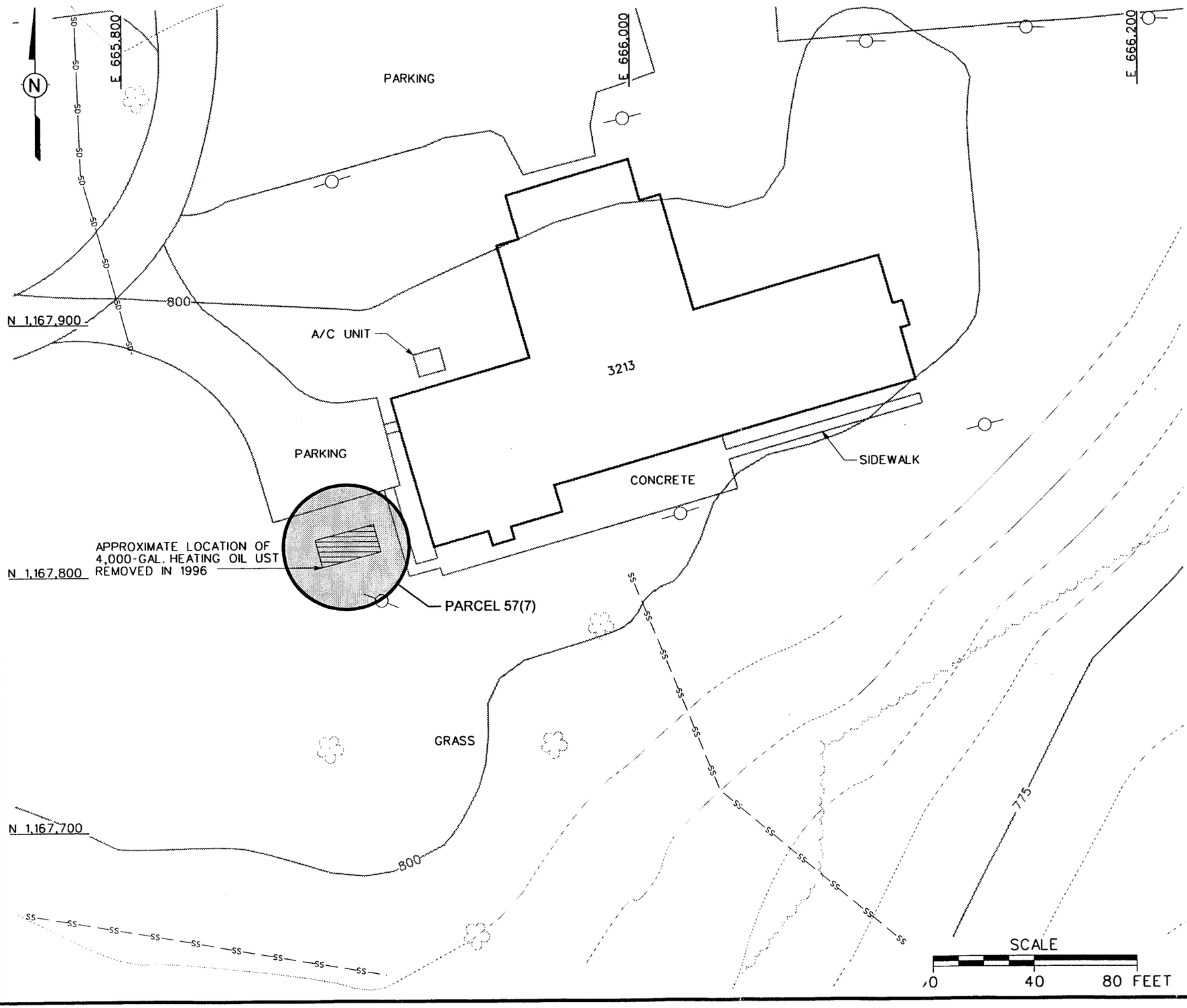
Building 3293 is known as the Chapel (Figure 1-25). One 4,000-gallon heating oil tank was removed in 1996. A closure report prepared by Theta was reviewed and is included in the UST Summary Report, Appendix A, Attachment 34 (IT, 1999). The closure report documented that product odor was not detected within the excavation. An examination of the removed tank noted that the tank was in good condition. The depth to groundwater was reported to be unknown. Neither soil nor groundwater samples were collected. The report notes that evidence of contamination was not observed. Approximately 182.5 yd^3 of soils were excavated during the UST removal action. Forty-eight yd^3 were unsuitable for compaction and were transported to the base borrow pit for disposal. The remaining soils were used to backfill the tank pit. Attached to this closure report was a VECP for not obtaining closure samples (see Section 1.2.6).

1.2.25 Personnel Building 162, Parcel 63(7)

Building 162 is known as the Personnel building (Figure 1-26). One 2,500-gallon heating oil tank was removed in 1996. A closure report, prepared by Theta, was reviewed and is included in the UST Summary Report, Appendix A, Attachment 35 (IT, 1999). The closure report documented that product odor was not detected within the excavation. An examination of the removed tank noted that the tank was in good condition. The depth to groundwater was reported to be greater than 5 feet below the bottom of the tank. Neither soil nor groundwater samples were collected. The report notes that evidence of contamination was not observed. The excavated soil was used to backfill the tank pit. Attached to this closure report was a VECP for not obtaining closure samples (see Section 1.2.6).

DBILLNG
c:\cadd\design\783149es.023
07 JUL 1999 11:13:39

STARTING DATE: 05/27/99	DATE LAST REV.:
DRAWN BY: D. BILLINGSLEY	DRAWN BY:
DRAWN BY: J. YACOUB	PROJ. MGR.: J. YACOUB
ENGR. CHCK. BY: J. TARR	INITIATOR: J. TARR
DRAFT. CHCK. BY:	DWG. NO: ...\783149es.023
	PROJ. NO.: 783149



LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS
- TREES / TREELINE
- PARCEL BOUNDARY
- UTILITY POLE
- SS — SANITARY SEWER LINE
- SD — STORM DRAINAGE LINE
- UST — UNDERGROUND STORAGE TANK

FIGURE 1-24
SITE MAP
RECREATION CENTER BUILDING 3213
PARCEL 57(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DBILLING
c:\cadd\design\783149es.024
07 JUL 1999 13:19:46

STARTING DATE: 05/27/99	DATE LAST REV.:
DRAWN BY: D. BILLINGSLEY	DRAWN BY:
DRAFT. CHCK. BY:	
ENGR. CHCK. BY: J. TARR	
INITIATOR: J. TARR	DWG. NO: ...\783149es.024
PROJ. MGR.: J. YACOUB	PROJ. NO.: 783149

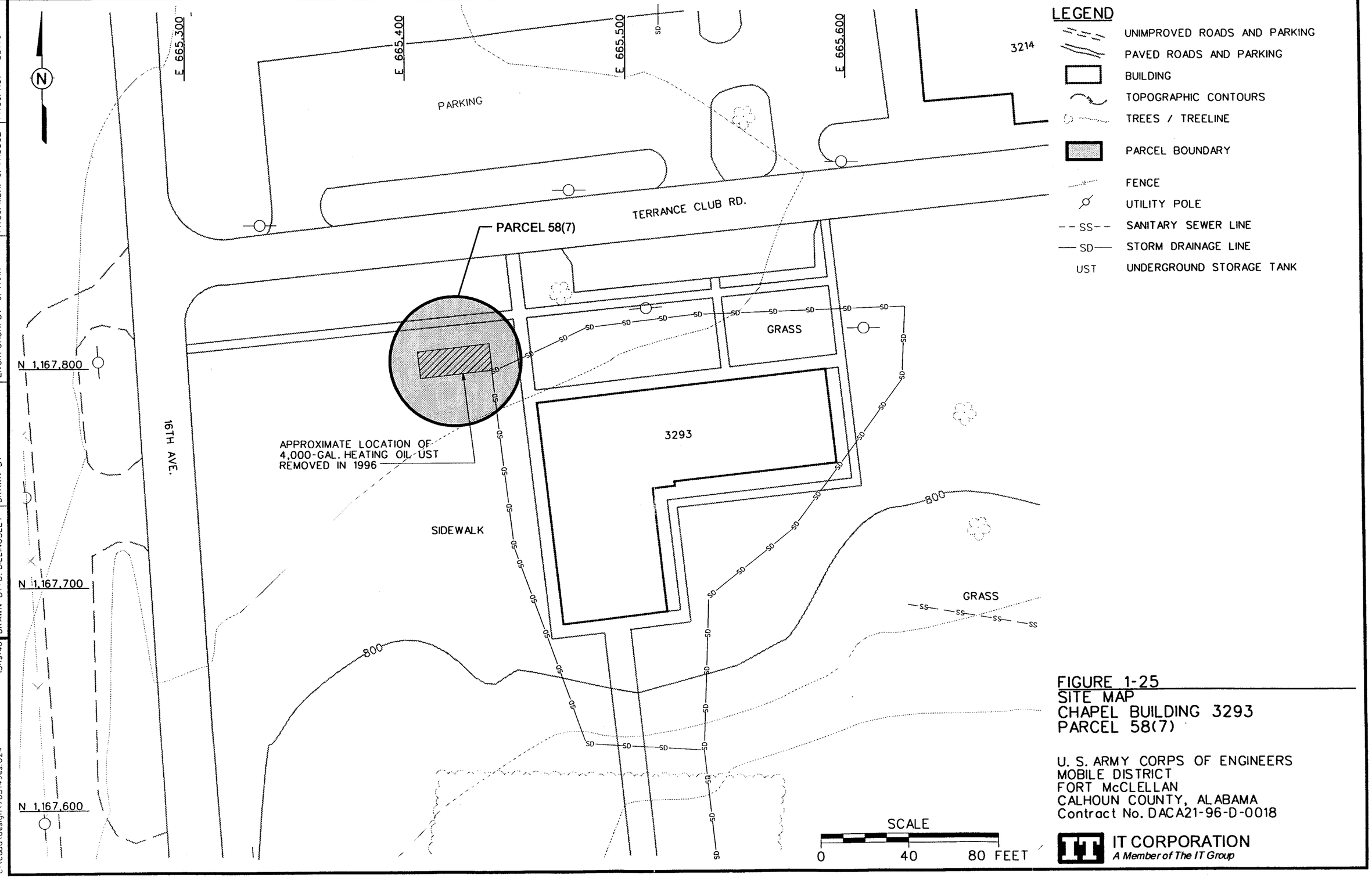


FIGURE 1-25
SITE MAP
CHAPEL BUILDING 3293
PARCEL 58(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

N

E 667,900

N 1,169,900

N 1,169,800

N 1,169,700

N 1,169,600

E 668,100

E 668,300

GRASS

GRASS

GRASS

GRASS

161

162

163

775

PARKING

20 TH STREET

PARKING LOT

STAIRS

CONCRETE

PARCEL 63(7)

2,500-GAL. HEATING OIL UST
REMOVED IN 1996

SCALE

0 40 80 FEET

LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS
- TREES / TREELINE
- PARCEL BOUNDARY
- -- SS -- SANITARY SEWER LINE
- — SD — STORM DRAINAGE LINE
- UST UNDERGROUND STORAGE TANK

FIGURE 1-26
SITE MAP
PERSONNEL BUILDING 162
PARCEL 63(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

STARTING DATE: 05/26/99	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: J. TARR
DRAWN BY: D. BILLINGSLEY	DRAWN BY:	ENGR. CHCK. BY: J. TARR	PROJ. MGR.: J. YACOUB
07 JUL 1999 13:35:25			PROJ. NO.: 783149
DBILLING c:\cadd\design\783149es.025			DWG. NO.: ...\783149es.025

1.2.26 WAC Museum, Building 1077, Parcel 167(7)

Building 1077 is known as the WAC Museum (Figure 1-27). Two 1000-gallon heating oil USTs have been located in the past at Building 1077. One UST, tracked as parcel 15(7), was removed in 1990 and replaced with another 1000-gallon UST (Parcel 167(7). Minimal soil contamination was found at the site. After monitoring wells were installed, sampled, and analyzed, the site investigation report concluded that no further action was required (IT, 1999).

The second 1,000-gallon heating oil tank (Parcel 167[7]) was removed in 1996. A closure report, prepared by Theta, was reviewed and is included in the UST Summary Report, Appendix A, Attachment 36 (IT, 1999). The closure report describes the removal of the second 1,000-gallon heating oil tank and its associated piping in August 1996. During this closure, no notable product odor was found within the excavation. Depth to groundwater was determined by excavating an additional five feet below the base of the pit. There was not any evidence of contamination and excavated soils were returned to the excavation. Environmental samples were not collected for analysis. Attached to this closure report was a VECP for not obtaining closure samples (see Section 1.2.6).

1.2.27 Building 1338, Parcel 502(7)

This facility contains one 150-gallon UST for the storage of gasoline (Figure 1-28). This UST was not assigned a CERFA parcel label because of the small quantity of fuel stored. Reportedly, the tank fuels a generator associated with a sewage lift station. This tank was removed and replaced with a 500-gallon UST in 1996. A closure report, prepared by SEMS, Inc., was reviewed and is included in the UST Summary Report, Appendix A, Attachment 7 (IT, 1999). Product odor was not detected during the tank closure activities. The depth to water was determined to be greater than five feet below the bottom of the tank during the installation of the newer tank. Sampling and analysis were not performed.

1.2.28 Building 3179, Parcel 505(7)

In April of 1991, IT removed a UST with a capacity of approximately 1,400 gallons. Approximately 750 gallons of gasoline and water was removed from the tank prior to removal. IT personnel conducted a site visit to verify the location of the former UST on June 1, 1999. The exact UST excavation area could not be determined based on visual interpretation (Figure 1-29). Other additional information or analytical data was not available for review. Also during the June 1999 IT site visit, aboveground storage tank racks were observed on the north side of Building 3179, however, there was not any information on any tank that may have been contained on the racks.

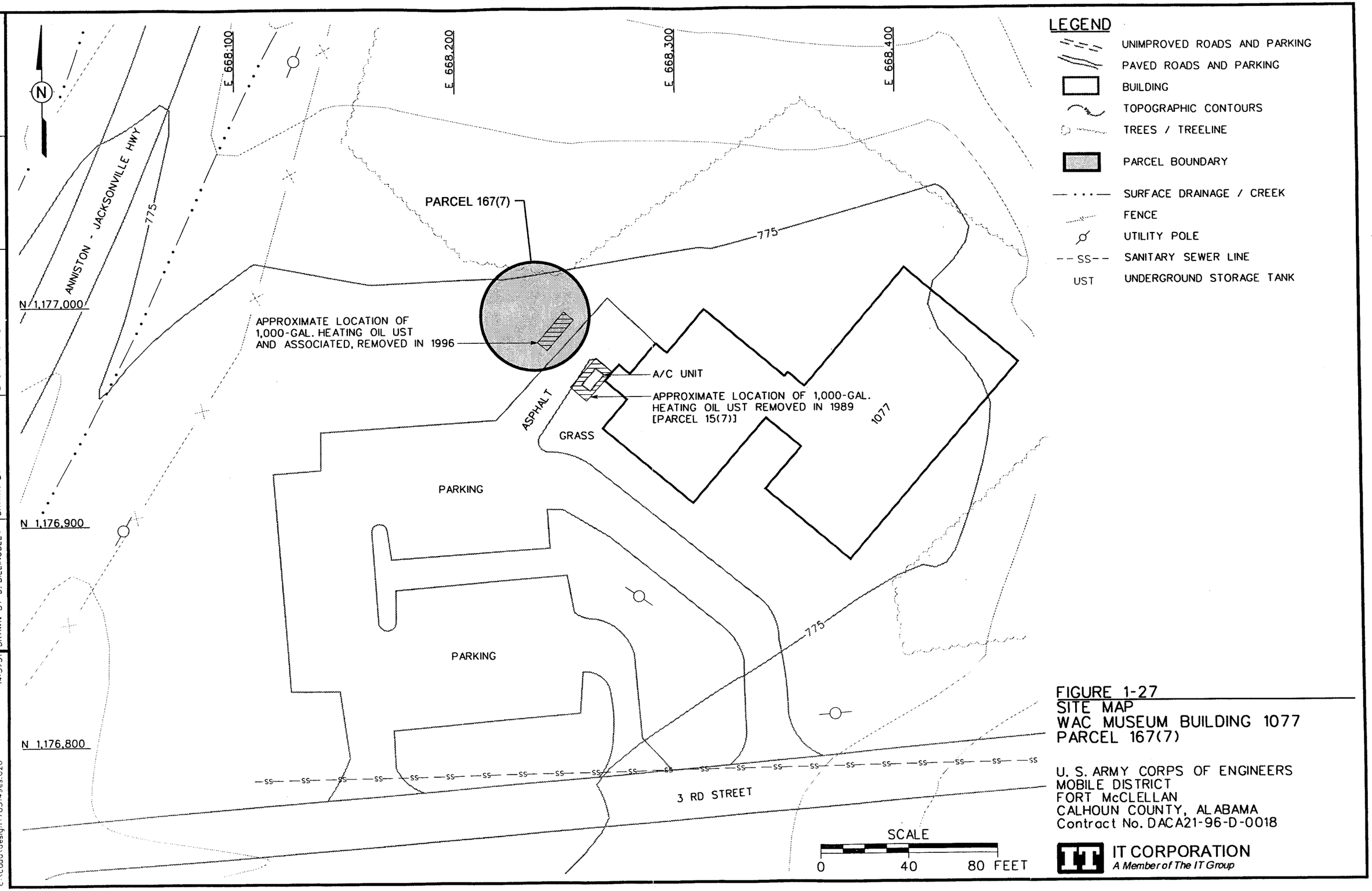


FIGURE 1-27
SITE MAP
WAC MUSEUM BUILDING 1077
PARCEL 167(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DRAWN BY: D. BILLINGSLEY	DATE LAST REV.:
STARTING DATE: 05/27/99	DRAWN BY:
INITIATOR: J. TARR	DWG. NO.: ...\783149es.026
PROJ. MGR.: J. YACOUB	PROJ. NO.: 783149
DRAFT. CHCK. BY:	
ENGR. CHCK. BY: J. TARR	

13 JUL 1999 14:51:51
DBILLING
c:\cadd\design\783149es.026

LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS
- TREES / TREELINE
- PARCEL BOUNDARY
- SURFACE DRAINAGE / CREEK
- UTILITY POLE
- SANITARY SEWER LINE
- STORM DRAINAGE LINE
- UST — UNDERGROUND STORAGE TANK

FIGURE 1-28
SITE MAP
BUILDING 1338
PARCEL 502(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DBILLING 07 JUL 1999 14:02:28
c:\cadd\design\783149es.027

STARTING DATE: 05/28/99	DATE LAST REV.:
DRAWN BY: D. BILLINGSLEY	DRAWN BY:
DRAFT. CHCK. BY:	INITIATOR: J. TARR
ENGR. CHCK. BY: J. TARR	PROJ. MGR.: J. YACOUB
DWG. NO.: ...\783149es.027	
PROJ. NO.: 783149	

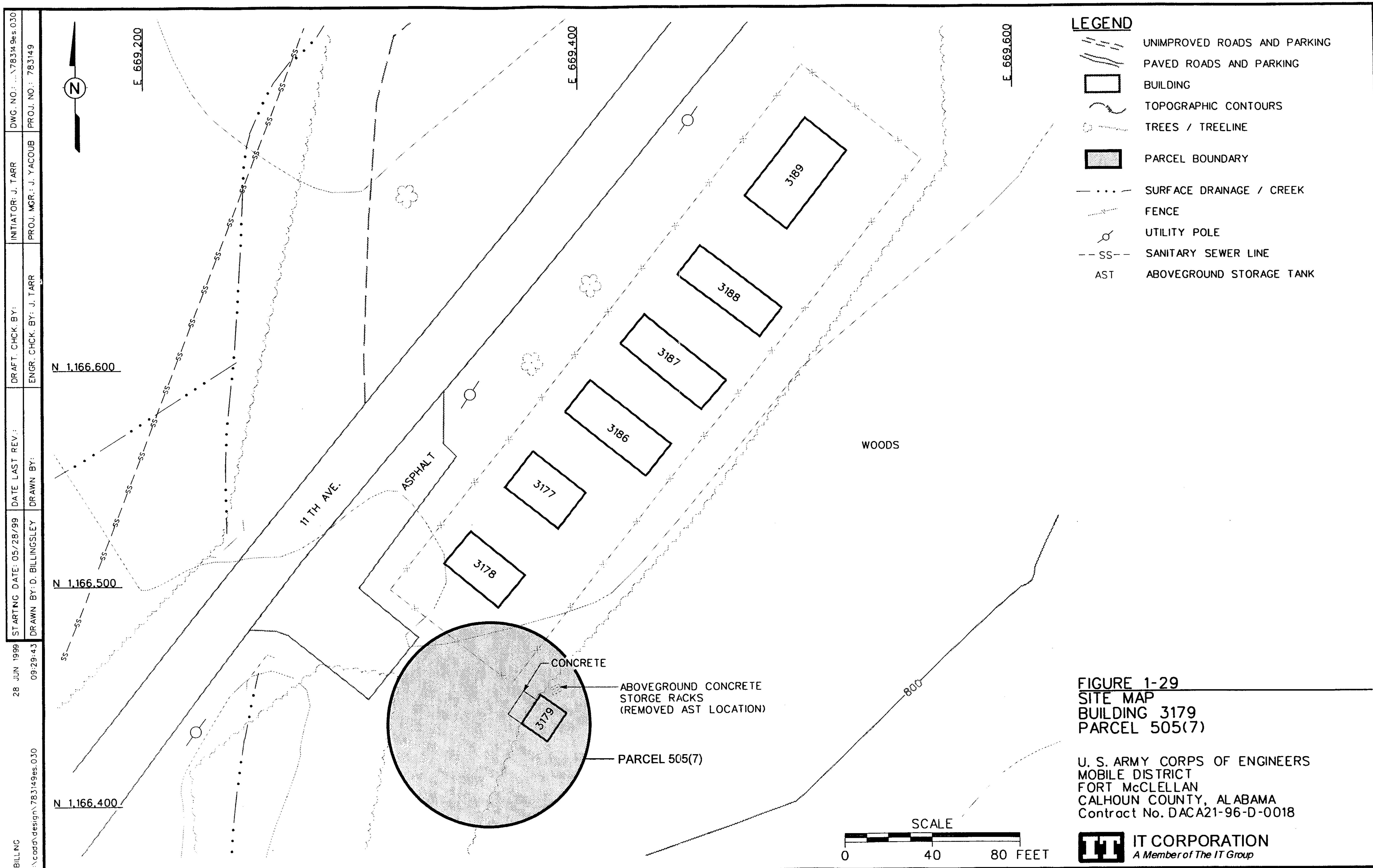

LEGEND
UNIMPROVED ROADS AND PARKING
PAVED ROADS AND PARKING
BUILDING
TOPOGRAPHIC CONTOURS
TREES / TREELINE
PARCEL BOUNDARY
SURFACE DRAINAGE / CREEK
FENCE
UTILITY POLE
--SS-- SANITARY SEWER LINE
AST ABOVEGROUND STORAGE TANK
E 669,200
E 669,400
E 669,600
N 1,166,600
N 1,166,500
N 1,166,400
11 TH AVE.
ASPHALT
3189
3188
3187
3186
3177
3178
3179
WOODS
800
CONCRETE
ABOVEGROUND CONCRETE STORGE RACKS (REMOVED AST LOCATION)
PARCEL 505(7)
SCALE
0 40 80 FEET
DWG. NO.: ...\783149es.030
PROJ. NO.: 783149
INITIATOR: J. TARR
PROJ. MGR.: J. YACOUB
DRAFT. CHCK. BY:
ENGR. CHCK. BY: J. TARR
DATE LAST REV.:
DRAWN BY:
STARTING DATE: 05/28/99
DRAWN BY: D. BILLINGSLEY
28 JUN 1999
09:29:43
DBILLING
c:\cadd\design\783149es.030

FIGURE 1-29
SITE MAP
BUILDING 3179
PARCEL 505(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

1.2.29 Building 3691, Parcel 506(7)

This facility contains one 150-gallon UST used for the storage of gasoline (Figure 1-30). This UST was not assigned CERFA parcel label because of the small quantity of fuel stored. Reportedly, the tank fuels a generator associated with a sewage lift station. This tank was closed in place and replaced with a 150-gallon UST in 1996. A closure report prepared by SEMS, Inc. was reviewed and is included in the UST Summary Report, Appendix A, Attachment 7 (IT, 1999). During the tank closure, product odor was not detected. The depth to water was determined to be greater than five feet below the bottom of the tank during the installation of the newer tank. Neither soil nor groundwater sampling was completed.

1.3 Scope of Work

The scope of work for activities associated with the UST Closure Assessments, specified by the statement of work (USACE, 1999), includes the following tasks:

- Develop the SFSP for 29 UST sites.
- Develop the SSHP for 29 UST sites.
- Provide UXO surface avoidance and downhole survey support during field work at 5 UST sites.
- Collect 86 subsurface soil samples and 56 groundwater samples (40 samples from drilling and monitoring well installation using hollow-stem augers, and 16 groundwater samples from existing monitoring wells) to determine current environmental conditions at each UST site prior to property transfer and whether chemicals exist in concentrations high enough to require further action.

If surface water samples or sediment samples collected during the Watershed Program indicate that the existing or removed USTs may be a contributing factor to contamination in the surface water bodies, additional samples and/or field work may be conducted. At completion of the field activities and sample analyses, draft and final UST Closure Assessment Reports will be prepared in accordance with current U.S. Environmental Protection Agency (EPA) Region IV and the ADEM requirements.

DRAFT. CHCK. BY:
ENGR. CHCK. BY: J. TARR
INITIATOR: J. TARR
PROJ. MGR.: J. YACOUB
DWG. NO.: ..\78314 9es.031
PROJ. NO.: 783149

DATE LAST REV.:
DRAWN BY:

STARTNG DATE: 05/26/99
DRAWN BY: D. BILLINGSLEY

13 JUL 1999
09:49:30

DBILLNG
c:\cadd\design\783149es.031

N

N 1,168,400

N 1,168,300

N 1,168,200

N 1,168,100

E 660,200

E 660,300

E 660,400

E 660,500

750

725

SUMMERALL TERRACE

ANNISTON JACKSONVILLE HWY.

PARCEL 506(7)

EXISTING 150-GAL. UST LOCATED UNDER
A 6' x12' CONCRETE PAD

3691

3690

150-GAL., GASOLINE UST
CLOSED IN PLACE IN 1996

DIRT ACCESS ROAD

TO SUMMERALL GATE ROAD

SS

LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS
- TREES / TREELINE
- PARCEL BOUNDARY
- SURFACE DRAINAGE / CREEK
- FENCE
- UTILITY POLE
- SANITARY SEWER LINE
- UST — UNDERGROUND STORAGE TANK

SCALE
0 40 80 FEET

FIGURE 1-30
SITE MAP
BUILDING 3691
PARCEL 506(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

2.0 Summary of Existing Environmental Studies

Environmental Science and Engineering, Inc. (ESE) conducted an EBS to document current environmental conditions of all FTMC property (ESE, 1998). The study identified sites that, based on available information, have no history of contamination and comply with U.S. Department of Defense (DOD) guidance on fast track cleanup at closing installations. The EBS also provides a baseline picture of FTMC properties by identifying and categorizing the properties by seven criteria.

1. Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).

2. Areas where only storage of hazardous substances or petroleum products has occurred.

3. Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response.

4. Areas where release, disposal, and/or migration of hazardous substances has occurred and all removal or remedial actions to protect human health and the environment have been taken.

5. Areas where release, disposal, and/or migration of hazardous substances has occurred and all removal or remedial actions are underway, but all required remedial actions have not yet been taken.

6. Areas where release, disposal, and/or migration of hazardous substances has occurred, but required actions have not yet been implemented.

7. Areas that are not evaluated or require additional evaluation.

The EBS was conducted in accordance with the Community Environmental Response Facilitation Act (CERFA) (CERFA-Public Law 102-426) protocols and DOD policy regarding contamination assessment. Record searches and reviews were performed on all reasonably available documents from FTMC, ADEM, U.S. Environmental Protection Agency (EPA) Region IV, and Calhoun County, as well as a database search of Comprehensive Environmental Response, Compensation, and Liability Act-regulated substances, petroleum products, and Resource Conservation and Recovery Act-regulated facilities. Available historic maps and aerial photographs were reviewed to document historic land uses. Personal and telephone interviews of past and present FTMC employees and military personnel were conducted. In addition, visual site inspections

were conducted to verify conditions of specific property parcels. In general, USTs were identified as sites where additional evaluation is needed to determine the presence or absence of chemical contaminants at the sites. In many instances, the data collected under this task order will also be useful in documenting compliant UST closures where adequate documentation is lacking.

UST closure investigations are provided in the UST Summary Report for these 29 UST sites. The UST Summary Report prepared by IT was submitted to the USACE, ADEM, and EPA in April 1999. The following is a summary of the information provided in the IT UST Summary Report for the investigation and closure of the 29 UST sites:

- Table 1-1 of the UST Summary Report lists all USTs with Parcel Number, building number, and other pertinent information about each UST site. The table lists all known USTs that are currently located, have been historically located, or may be potentially located at FTMC.

- Table 1-2 of the UST Summary Report lists USTs that were active at the time the UST Summary Report was prepared. This list was obtained from Mr. Nolan Lee Jaye, environmental engineer with Bregman & Company, Inc. Mr. Jaye is a contract employee who handles FTMC UST compliance issues. The table provides the tank locations by building numbers, tank capacity, construction material, content, and the year the tank was installed or brought into compliance.

- Tables 1-3 and Table 1-4 of the UST Summary Report list the UST inventory by parcel numbers, and cross-reference the UST inventory by building numbers. Other information such as tank capacity, tank contents, installation dates, and removal/closure dates (if known) is also listed on Table 1-4.

- Appendix A of the UST Summary Report provides all available ADEM UST Closure Reports for Fort McClellan.

- Appendix B of the UST Summary Report is a copy of the ADEM UST Closure Site Assessments Guidance Manual-Section III, May 1995.

- Appendix C of the UST Summary Report provides copies of preliminary and secondary investigation report and,

- Appendix D of the UST Summary Report summarizes analytical data collected during tank removals.